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HISTORY *of* WAR



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EASTERN SPIES**

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**How German armour was
crushed at Kursk**



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AT WAR**

The unlikely battle honours of
Europe's neutral nation

**SAMURAI
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Shock victory of Boer guerrillas



MEDAL OF HONOR
Union general who led from the front



BRITS IN BOSNIA
Daring mission to stop a genocide



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Welcome

“Soon many of the T-34s had broken past our screen and were streaming like rats all over the battlefield”

– Attrib. Heinz Guderian, on the Battle of Kursk

The ‘face-off’ between German Tigers and Soviet T-34s is one of the most fiercely debated contests in military history. Of course, direct comparison between the two tanks is facile – the Tiger was a heavy and the T-34 a medium-class. Yet both played huge roles in the Battle of Kursk.

As this issue explores, the numbers of machines off the assembly line, the nuances of their design, as well as their manufacturing speed and cost arguably decided the armoured clash at Kursk.

Even further behind the lines, Allied spy networks and code-

breakers had won the intelligence battle, revealing Hitler’s plans to the Soviets before the tank tracks began to rumble forward.



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Editor



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CONTRIBUTORS



TOM GARNER

This month Tom explores the military history of Europe’s famously neutral nation, Switzerland (p.14). He also spoke with wartime sweethearts Madge and Basil Lambert, who met during service in Burma in 1944 (p.88).



ANTHONY TUCKER-JONES

After 20 years working in the British Defence Intelligence Staff, Anthony is now an author and analyst, with several published titles on historic and modern conflicts. On page 38 he reveals the spy operations behind the victory at Kursk.



JAMES HOARE

History of War’s Group Editor-in-Chief had the pleasure of speaking with Richard Westley OBE, MC, who discusses his service during the Bosnian War, and his first-hand experience defending an entire town from a massacre (p.72).

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T-34s being assembled in Leningrad. While Soviet production emphasised quantity over quality, the T-34 was still a deadly vehicle

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TIGER T-34

26 Two of World War II's iconic tanks face off at the Battle of Kursk



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Panther medium tank

The German response to the T-34 was to create the finest all-round tank of WWII

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Thousands of horses were pressed into service on the Eastern Front

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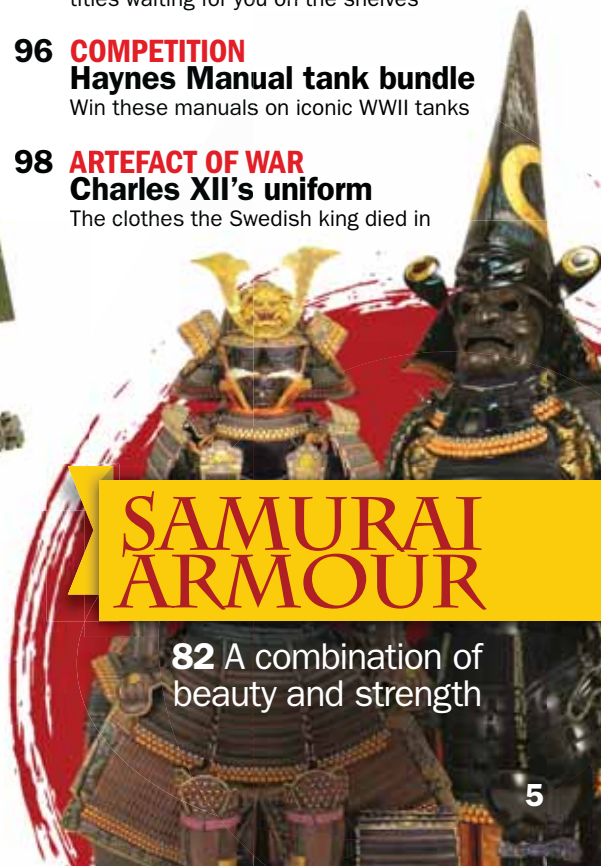
Win these manuals on iconic WWII tanks

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Charles XII's uniform

The clothes the Swedish king died in

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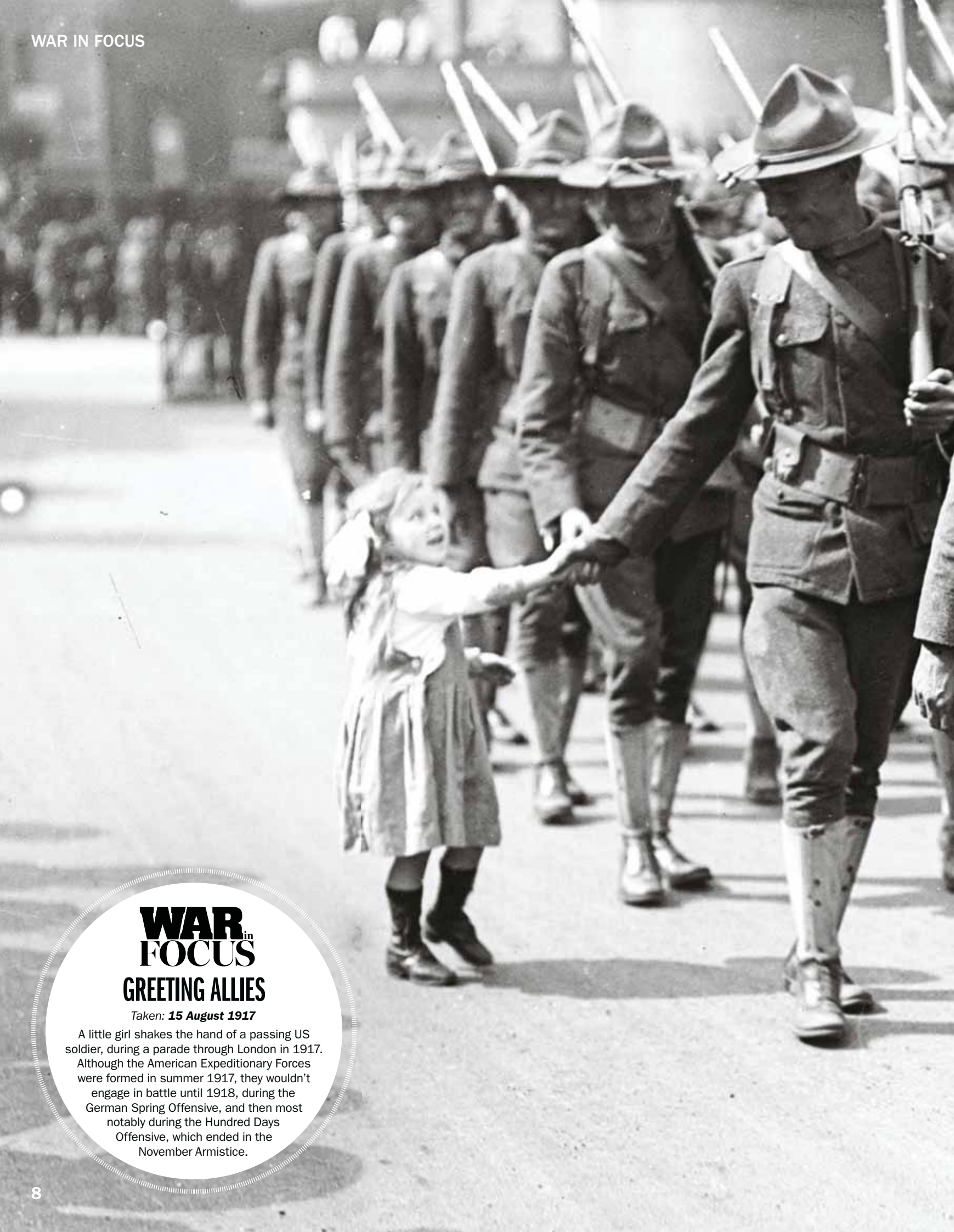


WAR **in** **FOCUS** **NAVAL GAZING**

Taken: October 1943

Two female ship workers walk along a dock at the Electric Boat Co. carrying cans of paint in their hands, as a group of male sailors watch them, in Groton, Connecticut, October 1943. Later known as General Dynamics Electric Boat, the company produced more than 70 submarines and almost 400 PT boats during WWII.





WAR **in** **FOCUS** **GREETING ALLIES**

Taken: 15 August 1917

A little girl shakes the hand of a passing US soldier, during a parade through London in 1917. Although the American Expeditionary Forces were formed in summer 1917, they wouldn't engage in battle until 1918, during the German Spring Offensive, and then most notably during the Hundred Days Offensive, which ended in the November Armistice.



WARⁱⁿ FOCUS

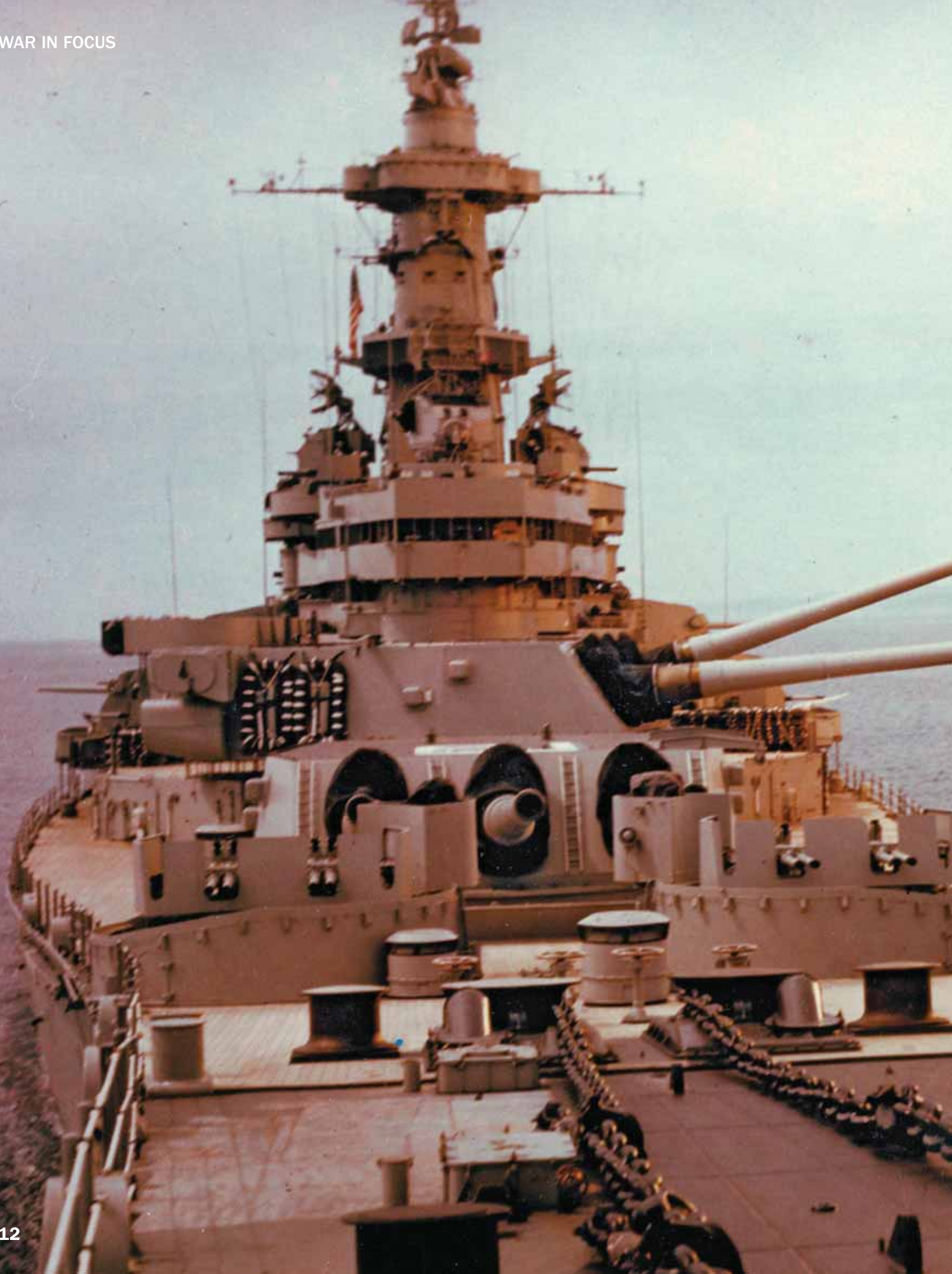
WELCOME HOME

Taken: **11 July 1982**

Family members and civilians crowd to welcome the Royal Marines, returning from the Falklands War, aboard the SS Canberra as it docks in Southampton. Canberra had been requisitioned by the Ministry of Defence shortly after the start of the war, and, after a refit, transported Royal Marines and the Parachute Regiment across the Atlantic to the islands.









WARⁱⁿ FOCUS

KOREAN BATTLESHIP DIPLOMACY

Taken: c. 1952

The US Navy battleship USS Iowa (BB-61) fires a 406mm shell towards a North Korean target.

The battleship was first commissioned in 1943 during WWII, and was then subsequently recommissioned in 1951, following the outbreak of the Korean War.



TIMELINE OF... SWITZERLAND AT WAR

The Alpine nation's famous neutrality is actually based in a deep military history that stretches back centuries

August 1291

FEDERAL CHARTER

Switzerland's oldest constitutional document is an alliance, or confederacy, between the Alpine cantons of Uri, Schwyz and Unterwalden to help each other resist any threat of violence. The charter is arguably the foundation of the country as well as a significant defensive policy.

To prevent civil war, Clause 12 of the charter states, "War or discord amongst the Confederates shall be settled by an arbiter...the Confederates are bound to defend the other party"



15 November 1315



BATTLE OF MORGARTEN

Morgarten is the first great military success of the Swiss Confederation against the powerful Austrian Habsburgs. It is also a significant early victory of dismounted commoners against mounted knights, which will become a chief characteristic of Swiss fighting methods.

Morgarten was largely won by soldiers from Schwyz. Their fighting prestige eventually gave the whole confederacy a new name: 'Schweiz', or 'Switzerland'

15th-19th centuries

SWISS MERCENARIES

After successfully defending their home cantons, Swiss soldiers become renowned soldiers throughout Europe. Over 1 million Swiss serve in foreign armies over three centuries, with remarkable success.

Swiss mercenaries cross the Alps to go home after deserting a French army in 1509. From the Italian Wars to the French Revolution one-fifth of the French army consisted of Swiss troops



**"PROTESTANT AND CATHOLIC CANTONS
FIGHT FOR HEGEMONY IN SPORADIC
CIVIL WARS THAT FINALLY END WITH THE
SONDERBUND WAR OF 1847"**



*Catholic Wil is
bombarded on
21 May 1712
by Protestant
artillery from
Zurich and Bern
during the Second
War of Villmergen*

INTERNAL CONFLICTS

Religious conflicts disrupt Swiss life for centuries. Protestant and Catholic cantons fight for hegemony in sporadic civil wars that finally end with the Sonderbund War of 1847.



*A Swiss officers' barracks
in the Umbrail Pass
on the Italian border
during WWI. Switzerland
was blockaded by the
Allies during 1914-15
but became a haven
for refugees and
revolutionaries such as
Vladimir Lenin*

WORLD WARS NEUTRALITY

After declaring its permanent neutrality in 1815, Switzerland famously avoids the carnage that befalls Europe during the world wars. The Swiss are threatened with invasions and suffer military violations by several powers, but they firmly defend their border.

FRENCH AND RUSSIAN BATTLEGROUND

Revolutionary France conquers Switzerland in 1798 and establishes the puppet 'Helvetic Republic', which lasts until 1815. The country becomes a battleground for competing French, Russian and Austrian armies in the Italian and Swiss Expeditions of 1799-1800.

*Right: Generalissimo
Alexander Suvorov leads
a Russian army over the
Swiss Alps. Suvorov is
considered to be one of
the greatest commanders
in Russian history*



January 1506

1529-31

1653-1847

1798-1815

1914-45



PONTIFICAL SWISS GUARD

A permanent contingent of 150 Swiss guardsmen is created to protect Pope Julius II. The guards soon earn a reputation for self-sacrifice and devotion to duty. Today, the 'world's smallest army' still acts as a personal escort to the pontiff.

*The Swiss Guards' colourful
uniforms are among the
oldest in continuous use. It is
rumoured that Michelangelo
designed them, but the story
is probably untrue*

WARS OF KAPPEL

The Reformation turns into an armed conflict between Protestant and Catholic Swiss cantons. Protestant Zurich fights a Catholic 'Christian Union' of five cantons in two wars, which ends in a Catholic victory.



The Protestant defeat during the Second War of Kappel led to the creation of a two-religion state in the Old Swiss Confederacy, something unique in Europe during the Early Modern period



Frontline

FORGING THE SWISS NATION

Mercenaries & Confederate armies established a formidable fighting reputation in many battles within Switzerland & its neighbours

1 BATTLE OF MORGARTEN

15 NOVEMBER 1315

MORGARTEN PASS, ZUG, SWITZERLAND

The battle that arguably establishes Swiss national identity is also an innovative engagement where common infantrymen defeat armoured mounted knights. 1,500 opposing Austrians are killed during the battle.

2 BATTLE OF SEMPACH

9 JULY 1386

SEMPACH, LUCERNE, SWITZERLAND

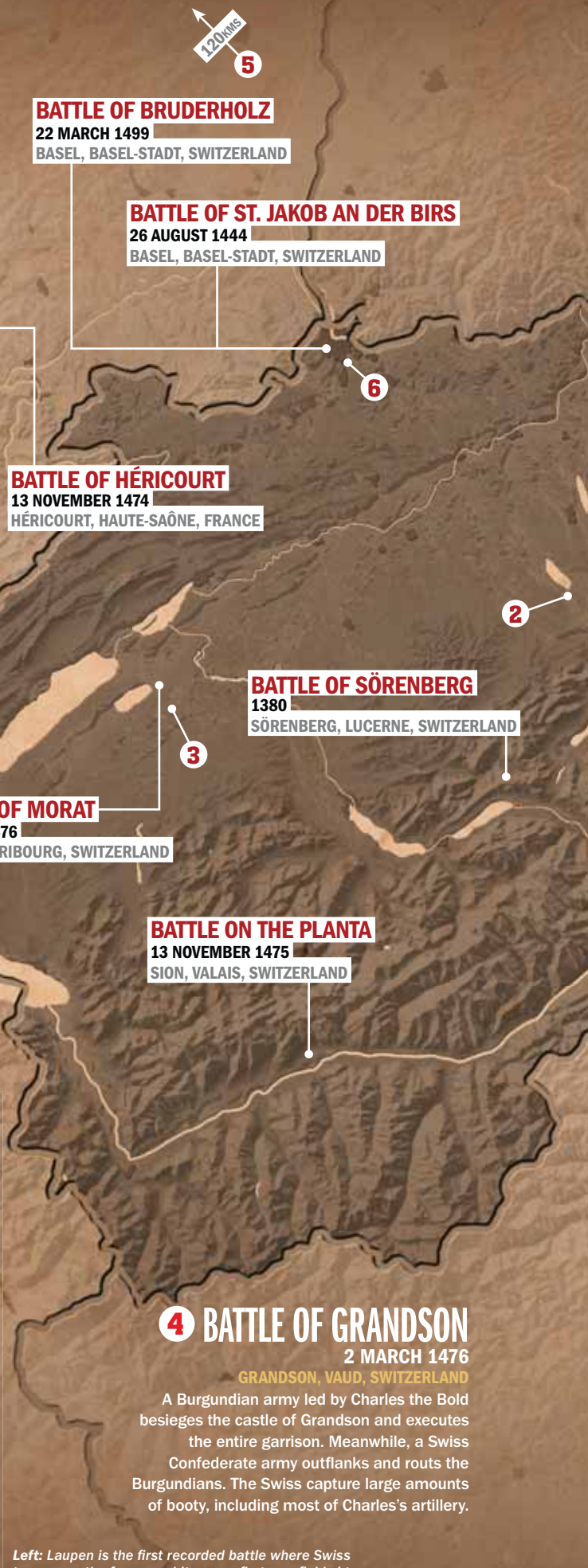
Sempach is a decisive Swiss victory against the Austrian Habsburgs. Leopold III, Duke of Austria is killed and the battle gives rise to the legend of the hero soldier Arnold von Winkelried.

3 BATTLE OF LAUPEN

21 JUNE 1339

LAUPEN, BERN, SWITZERLAND

Austrian Habsburgs and Burgundians besiege a Bernese garrison in Laupen, but a Swiss Confederacy force defeats the besiegers in open battle. Bern subsequently becomes closely associated with the Confederacy and eventually becomes the capital of Switzerland.



BATTLE OF BRUDERHOLZ

22 MARCH 1499

BASEL, BASEL-STADT, SWITZERLAND

BATTLE OF ST. JAKOB AN DER BIRS

26 AUGUST 1444

BASEL, BASEL-STADT, SWITZERLAND

BATTLE OF HÉRICOURT

13 NOVEMBER 1474

HÉRICOURT, HAUTE-SAÔNE, FRANCE

BATTLE OF SÖRENBERG

1380

SÖRENBERG, LUCERNE, SWITZERLAND

BATTLE OF MORAT

22 JUNE 1476

MURTEN, FRIBOURG, SWITZERLAND

BATTLE ON THE PLANTA

13 NOVEMBER 1475

SION, VALAIS, SWITZERLAND

4 BATTLE OF GRANDSON

2 MARCH 1476

GRANDSON, VAUD, SWITZERLAND

A Burgundian army led by Charles the Bold besieges the castle of Grandson and executes the entire garrison. Meanwhile, a Swiss Confederate army outflanks and routs the Burgundians. The Swiss capture large amounts of booty, including most of Charles's artillery.

Left: Laupen is the first recorded battle where Swiss troops use the famous white cross flag as a field sign

BATTLE OF ST. JAKOB AN DER SIHL
22 JULY 1443
ZÜRICH, SWITZERLAND

BATTLE OF SCHWADERLOH
11 APRIL 1499
TRIBOLTINGEN, THURGAU, SWITZERLAND

BATTLE OF GRYNAU
21 SEPTEMBER 1337
TUGGEN, SCHWYZ, SWITZERLAND

BATTLE OF NÄFELS
9 APRIL 1388
NÄFELS, GLARUS, SWITZERLAND

BATTLE OF GIORNICO
28 DECEMBER 1478
GIORNICO, TICINO, SWITZERLAND

BATTLE OF CASTIONE
6 JULY 1449
ARBEDO-CASTIONE, TICINO, SWITZERLAND

BATTLE OF ARBEDO
30 JUNE 1422
ARBEDO, TICINO, SWITZERLAND

BATTLE OF CREVOLA
28 APRIL 1487
CREVALADOSSOLA, PIEDMONT, ITALY

BATTLE OF HARD
20 FEBRUARY 1499
HARD, VORARLBERG, AUSTRIA

BATTLE OF FRASTANZ
20 APRIL 1499
FRASTANZ, VORARLBERG, AUSTRIA

Right: Francis I of France orders his soldiers to stop pursuing the defeated Swiss at the Battle of Marignano. The battle breaks the aura of the Swiss infantry's fighting prowess



5 BATTLE OF NANCY
5 JANUARY 1477
NANCY, MEURTHE-ET-MOSELLE, FRANCE

Charles the Bold besieges Nancy but encounters an advancing army led by the duke of Lorraine containing 10,000 Swiss mercenaries. Charles is defeated in battle and is killed by a Swiss halberdier. This battle enhances the reputation of Swiss soldiers.

6 BATTLE OF DORNACH
22 JULY 1499
DORNACH, SOLOTHURN, SWITZERLAND

The Swiss Confederacy defeats Imperial Habsburg troops in the last battle of the Swabian War. The de facto independence of Switzerland is subsequently recognised as part of the Treaty of Basel.

7 BATTLE OF NOVARA
6 JUNE 1513
NOVARA, PIEDMONT, ITALY

Novara is one of the last victories won by the Swiss infantry. A French army is overwhelmed after occupying Milan. 5,000 Swiss soldiers launch a furious assault on the French, who suffer 8,000 casualties.

8 BATTLE OF MARIGNANO
13-14 SEPTEMBER 1515
MELEGNANO, LOMBARDY, ITALY

Francis I of France avenges Novara. Despite heavy Swiss attacks the French artillery inflicts severe casualties and Francis wins a notable victory. The Swiss never launch an offensive against an external enemy again.

9 BATTLE OF KAPPEL
11 OCTOBER 1531
KAPPEL AM ALBIS, ZÜRICH, SWITZERLAND

The Reformation consumes Switzerland and the country fights a civil war between Catholic and Protestant cantons. Ulrich Zwingli, the Protestant leader of the Swiss Reformation, is killed during fighting at the Battle of Kappel.

Right: Zwingli was one of the founding fathers of the European Reformation, along with Martin Luther and John Calvin. His death in battle escalated the theological struggle and turned him into a Protestant martyr

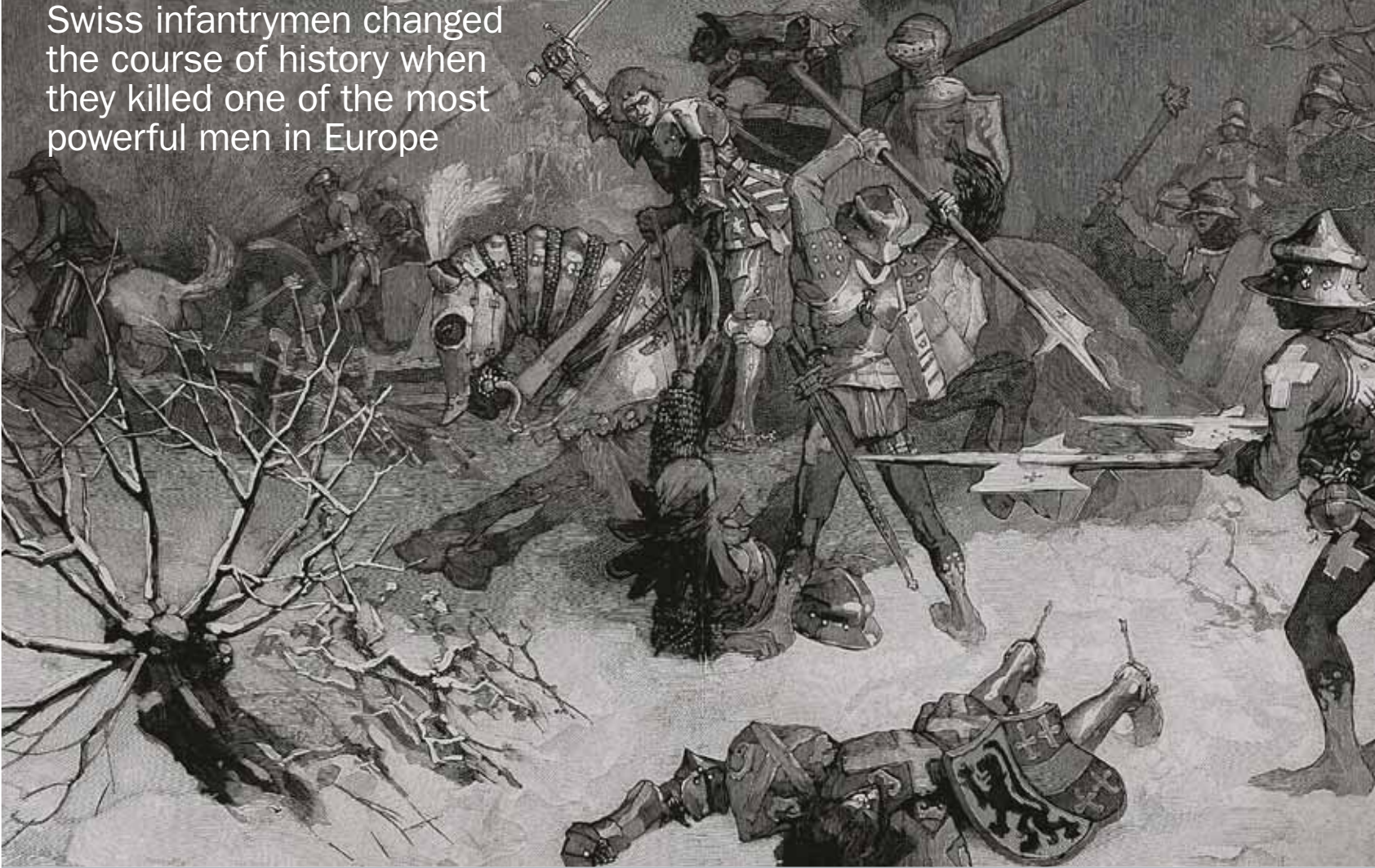


FAMOUS BATTLE

NANCY 1477

Swiss infantrymen changed the course of history when they killed one of the most powerful men in Europe

Charles the Bold is surrounded and killed by Swiss halberdiers. His body was later found among thousands of frozen corpses in the snow



Burgundy was a formidable European power during the 15th century. Burgundian dukes held the balance of power in France and they were highly ambitious. The duchy's territory included the majority of modern Belgium, Luxembourg and the Netherlands. Burgundian lands also covered large swathes of eastern France, including Lorraine, and the County of Burgundy bordered what is now western Switzerland.

When the last Valois duke, Charles the Bold, came to power in 1467 Burgundy was at its zenith. Although he swore allegiance to the French king, Charles aspired to declare Burgundy's full independence and to upgrade his duchy to a kingdom.

To achieve this, Charles made a lifelong enemy of Louis XI of France and attempted

to create an empire extending from the Netherlands to the Mediterranean. A large part of this expansion was to gain control of Austrian territory from Alsace to the Rhineland. Provinces in the Upper Rhine area sought help from Bern, whose commercial routes were threatened, and the Swiss Confederacy responded in kind. Swiss mercenaries already fought in Louis XI's army and an unprecedented peace with their ancient Austrian Habsburg enemy enabled the Confederacy to fight Charles head on.

The resulting Burgundian Wars of 1474-77 saw a series of improbable Swiss victories against Charles. Burgundy had a formidable early standing army that enforced strict discipline, employed specialised mercenaries (including over 1,000 English archers) and made large-scale use of artillery and other

firearms. Nevertheless, the Burgundians met their match in the Swiss infantry formations.

A bitter conflict

Beginning with the Battle of Héricourt in November 1474, the Swiss won subsequent victories at the Planta, Grandson and Murten. The Battle of Grandson increased the enmity between the Swiss and Burgundians when Charles ordered the execution of the entire Swiss garrison at Grandson, and from this point on neither side took prisoners.

The Swiss were also disinclined to take prisoners because they were an encumbrance to their movement and the acquisition of loot. Burgundian nobles were butchered along with common soldiers after battles, and this savage war would eventually have fatal consequences

“THE SWISS WERE ALSO DISINCLINED TO TAKE PRISONERS BECAUSE THEY WERE AN ENCUMBRANCE TO THEIR MOVEMENT AND THE ACQUISITION OF LOOT”



Charles the Bold was the last Valois duke of Burgundy, whose arrogant underestimation of the Swiss fighting ability directly led to his death

for Charles. The duke was twice defeated at Grandson and Murten, but his arrogance was such that he still referred to his Alpine enemies as “these boorish Swiss.” He would regret his condescending words.

Charles had meanwhile conquered Lorraine in 1475, but the local duke, René II, refused to accept Burgundian rule and recaptured the provincial capital of Nancy. Charles now directed all his energies to besieging the city, and René called upon his Swiss allies to come to Nancy’s relief.

Ducal oblivion

The relief force significantly outnumbered Charles’s Burgundian army of approximately 4,000-8,000 men. 15,000 troops from Lorraine were supported by 6,000-9,000 soldiers from the Swiss Confederacy. The Lorraine-Swiss army moved at such speed that Charles only knew of their approach at short notice. René’s army split into three groups before Nancy on 5 January 1477, with two-thirds of his men riding through snow-covered hills and forests to attack the Burgundian flanks. Charles had formed his men up into a traditional formation and had 30 guns at his disposal, but the Swiss blew their alpenhorns and launched a surprise attack from woods against the Burgundian right flank. At the same time Lorraine cavalry and infantry attacked Charles from the rear.

The Swiss attack was so fast that the Burgundians could not fire their guns in time before hand-to-hand fighting began. A Strasbourg chronicler said of the Swiss, “Neither cannon nor pierrier (small cannon) could stop them. And even though the culverins were turned against them, they were not able to be used in the attack, as time did not permit it.”

A combined unit of Swiss-Lorraine soldiers then fired a selection of early handguns and charged the Burgundian front line to overrun the enemy artillery. The Burgundians were soon put to flight and only a small number of survivors reached safety at Metz, which was over 50 kilometres (30 miles) away.

Charles was not among the few Burgundians who survived. The battle was fought in snow and it took two days of searching thousands of frozen bodies before his corpse was identified. He was surrounded by his fellow Burgundians and mercenary allies. Charles’s body was stripped and mangled – a blow to the head had killed him. Many sources say a Swiss halberdier inflicted this fatal wound, although this was never confirmed.

Burgundy immediately lost all of its power and influence. It ceased to exist as a political entity because Charles had left no son as his heir, and the duchy was quietly broken up between Louis XI and the Habsburgs.

This momentous event was largely thanks to the fighting prowess of the Swiss troops at Nancy. Burgundy had had one of the most formidable armies in Europe, but Switzerland’s martial reputation became renowned across the continent. Swiss soldiers would become a mainstay on European battlefields for centuries afterwards and put fear into the nobility that mere commoners could decisively destroy a powerful ruler.

THE SWISS HALBERDIER

THESE ADVANCED PIKEMEN WERE AGGRESSIVE, DISCIPLINED SOLDIERS WHOSE REVOLUTIONARY TACTICS ENHANCED THE FIGHTING POWER OF EUROPEAN INFANTRYMEN

During the late 13th century Scottish soldiers developed the ‘schilttron’, which was a dense formation of pikes and spears. This was intended to break up charges from mounted knights, but it was the Swiss who perfected this tactic with halberds.

The halberd was a 2.4-metre (eight-foot) long, two-handed pole weapon that had an axe blade and a spike. It was cheap to produce and had great versatility. The spike could push back approaching horsemen while the axe head was used to pull them to the ground at close quarters. Halberds were used with striking success by the Swiss against the Austrians at the battles of Morgarten, Laupen and Sempach. By the 15th century halberdiers had perfected their fighting skills to go on the offensive.

The Swiss became known for advancing in densely packed phalanxes that resembled a moving porcupine. They also honed their techniques by combining halberdiers, crossbowmen and hand gunners in units of three so that each man could help his comrades. This intelligent tactic changed the nature of European warfare, which was emphasised by the dramatic Swiss victories of the Burgundian Wars. Their influence could later be felt in the Spanish ‘tercio’ and the Napoleonic ‘square’ formations.

“THIS INTELLIGENT TACTIC CHANGED THE NATURE OF EUROPEAN WARFARE”

During the Burgundian Wars, Swiss halberdiers fought closely with other infantrymen in units of three during battles



The Swiss halberd’s multi-purpose nature made it a formidable weapon against cavalry charges

WEAPONS & EQUIPMENT

Switzerland's conscripted citizens are skilful soldiers who can repel any invading force with formidable guns, vehicles and iconic pocketknives

Switzerland's borders are not just protected by the Alps but also the impressive Swiss Armed Forces. All Swiss males are required to do military service from the age of 20,

which means that the country has more soldiers per capita than any other Western democracy. They utilise a fearsome array of equipment predominantly manufactured domestically and notable for its inventiveness and sophistication.

SWISS ARMY KNIFE

The famous folding pocketknife is an enduring symbol of Switzerland and was invented by Karl Elsener in the late 19th century. The first army knife was the 'Modell 1890', which was produced from 1891, while the 'Soldatenmesser 08' has been in service with the Swiss Armed Forces since 2008. The knives have remained remarkably similar in design and appearance during almost 130 years of service.

BASIC TOOLS

Karl Elsener was originally a cutlery manufacturer so the knife was designed for field cooking as well as to aid disassembling a rifle. Its four tools included a can opener, blade, reamer and a screwdriver.

Image: Getty

MODELL 1890

WOODEN GRIP

The grip was made of oak, rosewood or ebony that was waterproofed with rapeseed oil. The design was imperfect because the wood would crack and chip, so a reddish-brown fibre eventually replaced it in 1901.

MULTIPLE FUNCTIONS

Today's army-issue knife contains its famous array of useful tools. Its features include a wood saw, wire stripper, bottle and can openers, three screwdrivers and a distinctive serrated blade.

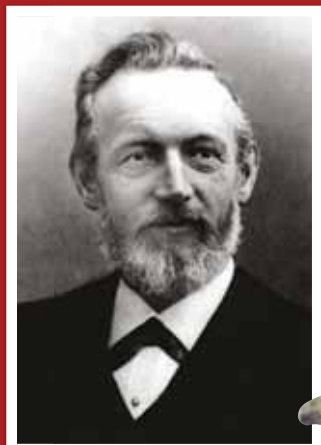
SOLDATENMESSER 08

HANDLE GRIP

Commercial knives can be bought in multiple designs and colours and are all stamped with the logo of Victorinox. The official army knife has a practical handle with finger grips and shades of green for camouflage.

KARL ELSENER

Karl Elsener invented the Swiss Army knife and also founded its manufacturing company, Victorinox. Elsener invented the company's name by combining the name of his mother, Victoria, and 'acier inoxydable', which is the French term for stainless steel.



SIG SG 550

This lightweight assault weapon is the standard-issue rifle of the Swiss Army. Developed in the late 1970s, the SG 550 is gas-operated and can be fitted with a detachable scope mount. It is also capable of firing grenades and has a detachable folding bipod that can fold to the hand guard.

Over 600,000 SG 550s have been produced and elite units use it worldwide. This weapon is commonly stored at home by many members of Switzerland's citizen army.



PANZERFAUST 3

Designed in West Germany between 1978-85, the Panzerfaust 3 is a 60mm single-shot anti-tank weapon and has been in service since 1992. Its rocket-powered 110mm warhead can break through 71 centimetres (28 inches) of armoured protection and 1.5 metres (five feet) of concrete. It has a maximum range of 396 metres (1,300 feet).



Although it is now an effective weapon, the Panzerfaust 3 had initial design defects that included excessive weight, weak rockets and a tendency to jam



SIG SAUER P220

The P220 semi-automatic pistol has been in service with the Swiss Army since 1975 and is known as the 'Pistole 75'. Its primary cartridge is a spring-loaded detachable box magazine containing nine rounds, with a muzzle velocity of 345 metres per second (1,132 feet per second).

The Pontifical Swiss Guard also uses the P220 in its official function as bodyguards to the pope

HG-85

The 'Handgranate 85' is a Swiss-designed time fuse-detonated fragmentation grenade. Although its diameter is only 65mm (2.5 inches) it weighs 465 grams (one pound) and contains 155 grams (0.34 pound) of TNT. Fragments can have a range of 91 metres (300 feet) upon detonation, so the grenade is devastating against soft targets.

The HG-85 has been in operational service with the Swiss Army since 1985 and is also used by the military forces of the Netherlands and the United Kingdom



"THE INTERNATIONALLY RECOGNISED RED CROSS WAS ITSELF ORIGINALLY AN INVERSION OF THE SWISS FLAG"



MOWAG PIRANHA

The Swiss MOWAG company has been producing the Piranha since 1972. It is an armoured fighting vehicle that can be adapted for many roles. The Piranha's variants include a command vehicle, armoured personnel carrier, reconnaissance, fire support, mortar carrier and ambulance duties. Its weapons are quickly mounted and it can be 6x6, 8x8 or 10x10 wheeled.

This Piranha IB 6x6 ambulance has an amphibian drive that is powered by two propellers. The internationally recognised red cross was itself originally an inversion of the Swiss flag

DANGEROUS NEUTRALITY?

Despite its location in central Europe, Switzerland managed to remain neutral through two horrendous conflicts, although it did not totally avoid wartime controversies

In 1914 Switzerland had been officially neutral for almost 100 years and its army had last fought during a short civil war in 1847. Compared to its surrounding neighbours' armed forces the Swiss army was small and numbered 450,000 civilian conscripts. Half of these men were reservists, and the only full-time soldiers were 240 officer instructors and 100 fortification engineers.

When war broke out it was feared that France or Germany would invade Switzerland to outflank their opponents. The Western Front itself literally ended on the Swiss border in an area called 'Kilometre Zero'. A series of bunkers and observation posts were built that were marked with the Swiss flag to ensure that belligerent soldiers would not fire at them. There were other defences, such as trenches, barbed wire and supporting artillery, but relations between the Swiss and fighting troops remained good.

The fear of invasion eventually wore off and the Swiss initially benefitted from trade with fighting nations, but by 1916 the war was causing shortages. Once Italy entered the war on the Allied side Switzerland was surrounded by warring countries. 40 per cent of food was imported and 80 per cent of that came from Allied countries, so Switzerland's neutrality was compromised by reactionary German economic pressure. Rationing was introduced and civil unrest became a problem.

Pro-German and pro-French supporters were often divided by language, and the government had to suspend or caution newspapers for un-neutral attitudes. Two Swiss army colonels were sacked after passing intelligence reports to German and Austrian military attachés. The country also became a haven for political exiles, the most famous being Vladimir Lenin. Switzerland inadvertently contributed to the Russian Revolution when the 'Sealed Train' that transported Lenin and other Bolsheviks back to Russia in 1917 began its journey from Zurich.

There was also a humanitarian aspect to Switzerland's neutrality. The International Red Cross provided substantial assistance to

prisoners of war on both sides. This took the form of regular inspections of prison camps, mass mail deliveries and interning seriously ill or wounded POWs in Switzerland itself.

"A pimple on the face of Europe"

Switzerland's successful neutrality during WWI enabled the Swiss to learn valuable lessons. But they would endure a greater test during WWII. The politics of Europe had poisoned during the interwar period and by 1939 Switzerland was bordered by Nazi Germany, Anschluss Austria and Fascist Italy. Despite deep German connections, Adolf Hitler mockingly referred to his Alpine neighbour as "a pimple on the face of Europe" and drew up invasion plans known as 'Operation Tannenbaum'.

The Swiss responded by mobilising their defence forces three days before Germany invaded Poland on 28 August 1939, and the country remained on high alert until 1945. 11 German aircraft were actually shot down in 1940 by the Swiss air force when they violated neutral airspace. By the end of the year Switzerland was completely surrounded by Axis forces, including occupied France. The Swiss remained defiant and even planned to fight a guerrilla war in the Alps. The borders were also reinforced with concrete bunkers and tank traps.

Unlike WWI, most Swiss newspapers supported the Allies and support for Nazism among the general population was low. Switzerland sheltered over 180,000 civilian refugees during the war, but it was not free from Nazi connections. Thousands of Jewish refugees were refused entry and the country was tainted by several financial scandals, the most famous being the accusation of buying 'Nazi Gold'. This was Jewish gold that had been stolen by the Nazis and then bought by amoral Swiss financiers.

Interned POWs were also not safe from controversy. Captain André Béguin ran a notorious internment camp at Wauwilermoos where POWs were held in filthy huts. Béguin was a Nazi sympathiser who withheld Red Cross parcels from prisoners, and the living

conditions included cold barracks, poor food and primitive toilets. This was ironically a direct contravention of the Geneva Convention, and Béguin was belatedly punished in 1946.

Despite these dark episodes, the Swiss largely distanced themselves from the repressive regimes that surrounded them. Their own far-right party, the National Front, was banned in 1940, and the Red Cross provided care and assistance to POWs worldwide on an even bigger scale than it had in WWI. By 1945, the country had managed to maintain its neutrality despite the carnage that raged beyond its borders.

A Swiss ski patrol passes through the Matterhorn mountain district during World War I

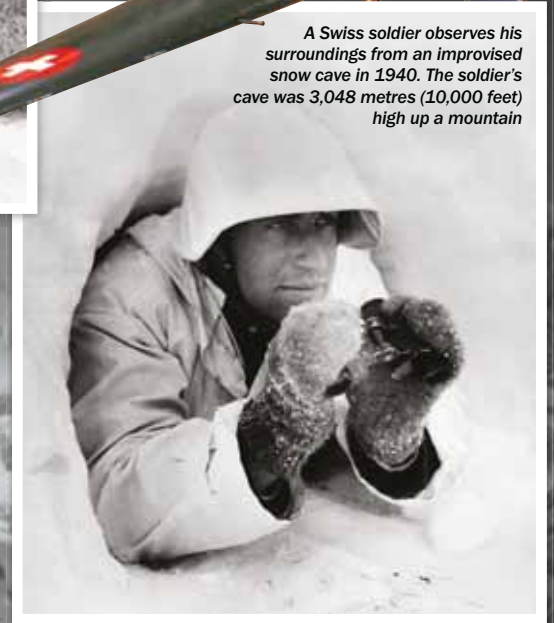
"THOUSANDS OF JEWISH REFUGEES WERE REFUSED ENTRY AND THE COUNTRY WAS TAINTED BY SEVERAL FINANCIAL SCANDALS WITH THE MOST FAMOUS BEING THE ACCUSATION OF BUYING "NAZI GOLD"



Swiss and German soldiers guard the border in a relaxed fashion on the outskirts of Basel, 1916



A Messerschmitt Bf 109 of the Swiss air force that was in service between 1939-48. Swiss pilots rigorously defended their neutral airspace and shot at Axis and Allied aircraft



A Swiss soldier observes his surroundings from an improvised snow cave in 1940. The soldier's cave was 3,048 metres (10,000 feet) high up a mountain



SWISS HEROES & COMMANDERS

Switzerland has bred humanitarians to relieve the suffering of war, as well as heroic warriors, clever generals and military theorists

HENRI DUNANT

ARCHITECT OF THE GENEVA CONVENTION & FOUNDER OF THE INTERNATIONAL RED CROSS
1828-1910

Although he was a civilian, Henri Dunant made an invaluable contribution to humanitarian aid and ethical standards in modern warfare. He was born into a religious family in Geneva and worked as a businessman in North Africa and Italy. While he was organising a financial scheme with Napoleon III of France in 1859, Dunant travelled to directly visit the emperor on campaign. He subsequently witnessed the Battle of Solferino and what he saw horrified him.

Tens of thousands of soldiers were lying dead, dying or wounded on the battlefield and Dunant organised assistance to help the troops. This experience played heavily on his conscience and he published a famous book of this event called *A Memory Of Solferino*. The book proposed the formation of voluntary relief societies to prevent and alleviate suffering in war and peace, regardless of race or religion.

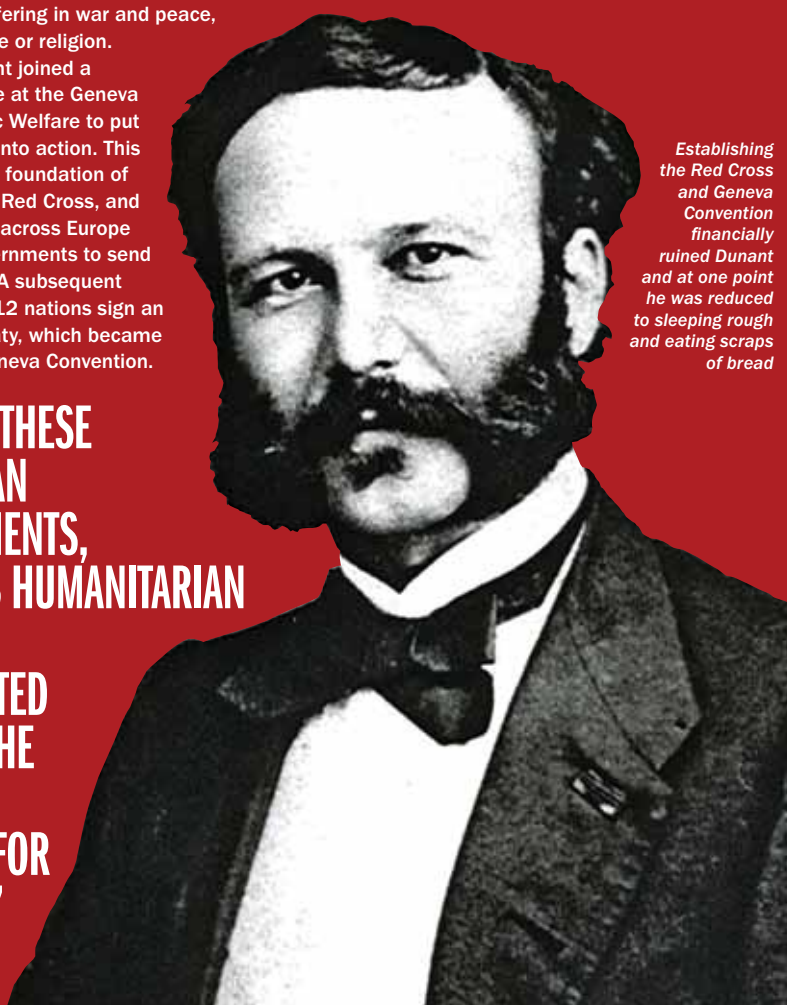
In 1863 Dunant joined a committee of five at the Geneva Society for Public Welfare to put these proposals into action. This was the effective foundation of the International Red Cross, and Dunant travelled across Europe to persuade governments to send representatives. A subsequent conference saw 12 nations sign an international treaty, which became known as the Geneva Convention.

The convention guaranteed neutrality towards aid personnel, to provide supplies for their use and adopted the famous Red Cross on a field of white as an identifying symbol. Dunant subsequently expanded the scope of Red Cross activities to cover naval personnel in wartime and natural catastrophes in peacetime. The Geneva Convention was also expanded to cover the handling of prisoners of war and the settling of international disputes by peaceful courts of arbitration.

Despite these herculean achievements, Dunant's humanitarian efforts bankrupted him and he became a recluse for decades. Nevertheless, his work was finally recognised in the 1890s and he was jointly awarded the first Nobel Peace Prize with French pacifist Frédéric Passy in 1901.

Establishing the Red Cross and Geneva Convention financially ruined Dunant and at one point he was reduced to sleeping rough and eating scraps of bread

“DESPITE THESE HERCULEAN ACHIEVEMENTS, DUNANT’S HUMANITARIAN EFFORTS BANKRUPTED HIM AND HE BECAME A RECLUSE FOR DECADES”



Along with William Tell, Arnold von Winkelried is a national hero of Switzerland whose brave if grisly death reputedly contributed to a decisive Swiss victory in 1386

ARNOLD VON WINKELRIED

THE LEGENDARY FOLK HERO OF THE BATTLE OF SEMPACH (DISPUTED) – 1386

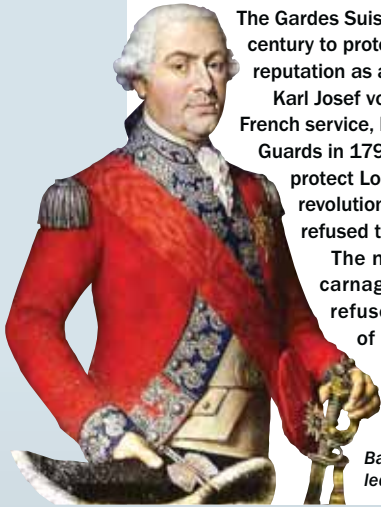
On 9 July 1386, a Swiss Confederacy army fought the forces of Leopold III, Duke of Austria at Sempach. Leopold was killed and his men were routed thanks to the actions of Arnold von Winkelried. This decisive victory solidified Switzerland into a more unified country.

According to legend, Winkelried was an Unterwalden knight whose sacrifice turned the tide of the battle. The Swiss were struggling to break through thick lines of Austrian troops, but Winkelried threw himself against the enemy and gathered all pikes within reach towards him. He was killed, but his actions breached the Austrian ranks and his comrades rushed in to win the battle.

Winkelried became a national hero, but proof for his historical existence is debated. His story was first recorded in the 16th century and was considered authentic, before it lost favour in recent centuries. Nevertheless, real men called 'Erni von Winkelried' and 'Arnold Winkelreit' lived in Stanz during the late 14th century. Unnamed soldiers who match Winkelried's story also appeared in the late medieval chronicles and his name appeared on a list of the Sempach dead that was based on a lost book. Winkelried's existence may never be confirmed, but there does appear to be grains of truth in his story.

KARL JOSEF VON BACHMANN

THE SWISS GUARD WHO FAMOUSLY BECAME EMBROILED IN THE FRENCH REVOLUTION 1734-92



The Gardes Suisses (Swiss Guards) regiment was formed in the early 17th century to protect French monarchs at their royal palaces and earned a reputation as a disciplined, elite force.

Karl Josef von Bachmann came from a long line of Swiss guardsmen in French service, but his timing was unfortunate. As commander of the Swiss Guards in 1792 he and 900 men were a reduced force who remained to protect Louis XVI at the Tuileries Palace in Paris. Tens of thousands of revolutionaries stormed the palace on 10 August 1792 but the Guards refused to surrender.

The majority of the Swiss soldiers were killed in the ensuing carnage and Bachmann was captured. As a Swiss officer he refused to acknowledge the revolutionary tribunal's accusation of treason against him, but he was nonetheless sentenced to death. On the day of his execution he wore his red Guards uniform and impressed everyone by his noble bearing before he was guillotined.

Bachmann was a high-profile victim of the storming of the Tuileries, which led to the formal abolition of the French monarchy six weeks later

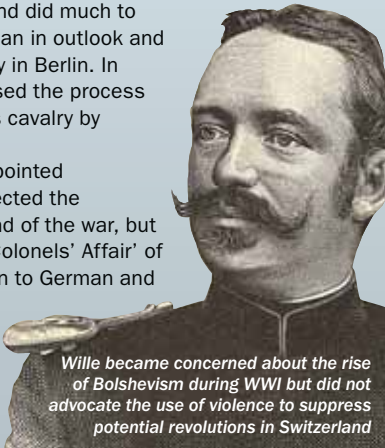
ULRICH WILLE

THE COMMANDER-IN-CHIEF OF THE SWISS ARMY DURING WWI 1848-1925

Wille was a notable reformer of the Swiss Army and did much to influence today's modern force. He was pro-German in outlook and had studied the organisation of the Prussian army in Berlin. In the last decades of the 19th century he reorganised the process of recruit instruction and also reformed the Swiss cavalry by introducing an unpopular cavalry code.

In 1914 Wille was promoted to general and appointed as commander-in-chief of the Swiss Army. He directed the occupations of Switzerland's frontiers until the end of the war, but his command was not without controversy. The 'Colonels' Affair' of 1916 saw two Swiss colonels pass on information to German and Austrian diplomats and Wille was criticised for punishing them with lenient sentences.

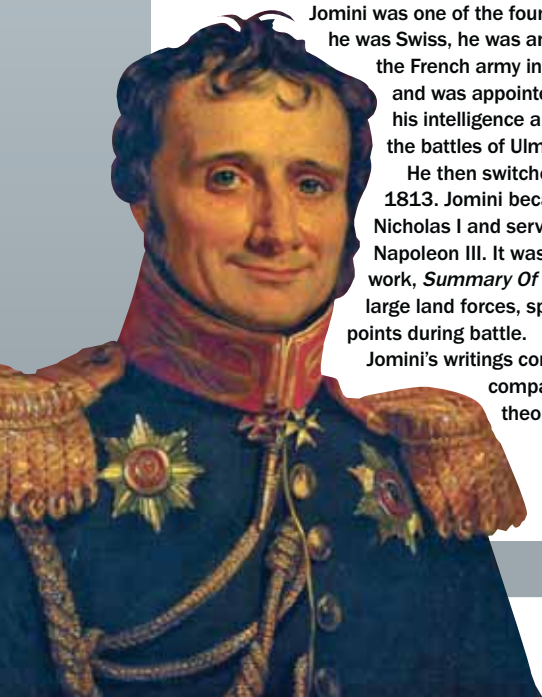
Nevertheless, Switzerland avoided an invasion during the war. Wille is generally credited with successfully turning the army from a citizen army into a highly disciplined force.



Wille became concerned about the rise of Bolshevism during WWI but did not advocate the use of violence to suppress potential revolutions in Switzerland

ANTOINE-HENRI JOMINI

THE EMINENT MILITARY THEORIST WHO SERVED BOTH NAPOLEONIC FRANCE AND TSARIST RUSSIA 1779-1869

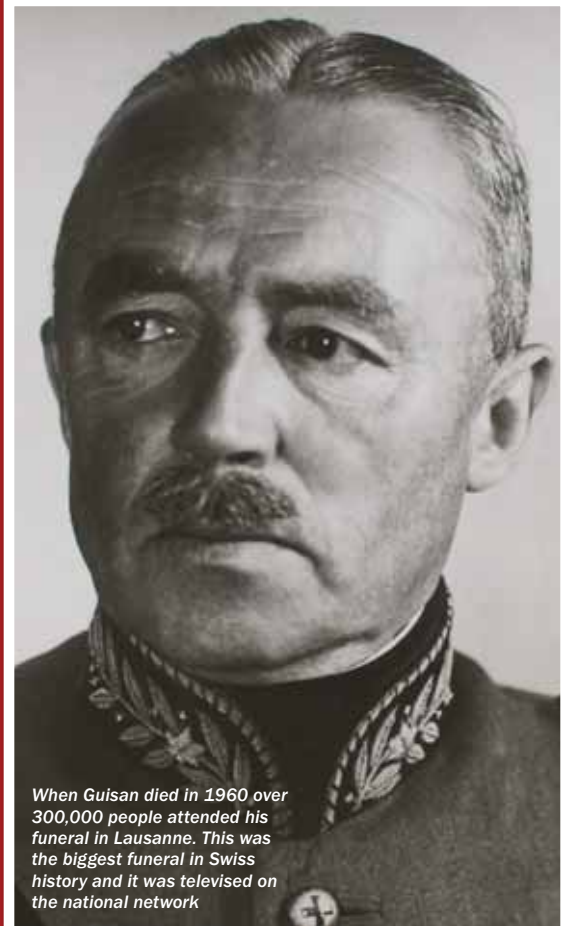


Jomini was one of the founding fathers of modern military theory. Although he was Swiss, he was ambitious to become a soldier and volunteered in the French army in 1798. Jomini published his first book in 1805 and was appointed as a French staff colonel. Napoleon I admired his intelligence and Jomini fought under Marshal Michel Ney at the battles of Ulm, Jena and Eylau.

He then switched sides and entered Russian service from 1813. Jomini became aide-de-camp to tsars Alexander I and Nicholas I and served as a military advisor to Tsar Alexander II and Napoleon III. It was for Alexander II that he wrote his most famous work, *Summary Of The Art Of War*, which advocated the use of large land forces, speed, manoeuvrability and capturing strategic points during battle.

Jomini's writings constituted 25 translated works, and he is often compared with the more famous Prussian military theorist Carl von Clausewitz.

Jomini's works were widely studied in military academies during the 19th century, including West Point. Many American Civil War commanders were subsequently influenced by his theories



When Guisan died in 1960 over 300,000 people attended his funeral in Lausanne. This was the biggest funeral in Swiss history and it was televised on the national network

HENRI GUISAN

COMMANDER-IN-CHIEF OF THE SWISS ARMED FORCES DURING WWII 1874-1960

Guisan was a qualified agriculturist before he was appointed as an army officer in 1894. During WWI he was a lieutenant colonel and was elected as a general by the Swiss Federal Assembly shortly before the outbreak of WWII.

As the new commander-in-chief of the Swiss Armed Forces, Guisan had to defend Switzerland's neutrality despite being surrounded by warring nations. On 25 July 1940 he gave a speech to his troops declaring that surrender was impossible and that the army would resort to bayonets if bullets ran out.

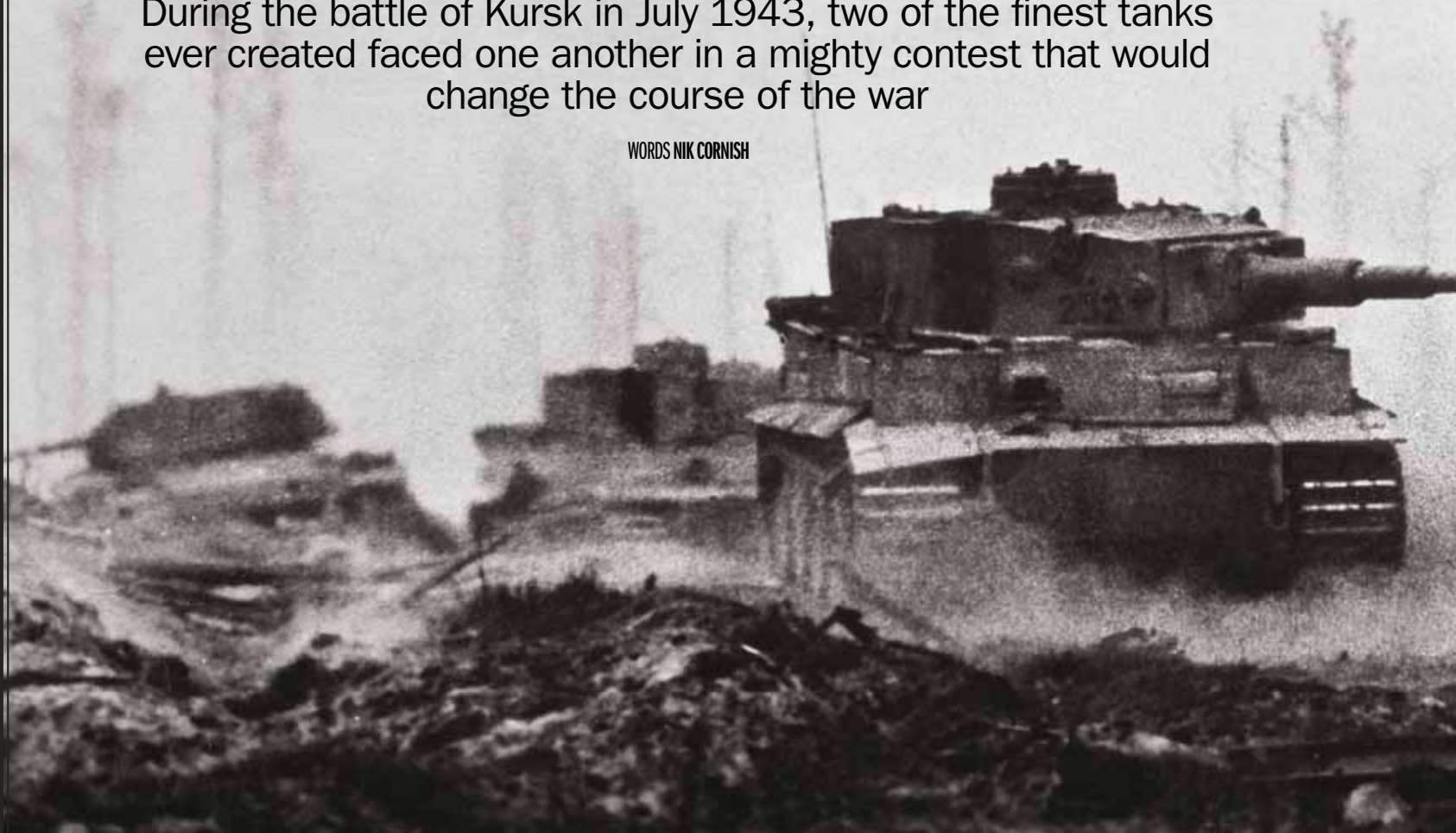
His actual strategy was no less defiant. Guisan anticipated an invasion by the Axis powers and implemented a defence plan called *Réduit National* (National Redoubt). If attacked, the Swiss Army would abandon its border defences and retreat into the Alps to conduct guerrilla warfare and other resistance tactics. Although it was a controversial concept, Switzerland was never invaded. Guisan's deterrence tactic appeared to have succeeded, and he became a national hero.

"ON 25 JULY 1940 HE GAVE A SPEECH TO HIS TROOPS DECLARING THAT SURRENDER WAS IMPOSSIBLE AND THAT THE ARMY WOULD RESORT TO BAYONETS IF BULLETS RAN OUT"

TIGER

During the battle of Kursk in July 1943, two of the finest tanks ever created faced one another in a mighty contest that would change the course of the war

WORDS NIK CORNISH



Germany's Operation Citadel aimed to squeeze off the salient around Kursk, but standing before their formidable armoured divisions stood a Soviet defence bristling with its own powerful tanks. The two had met briefly, earlier in the year, during the fighting around Rostov-on-Don and Kharkov, but Kursk was the first occasion in which they fought in significant numbers. In July 1943 Army Group Centre (AGC), faced Central Front, and Army Group South (AGS) prepared to do battle with Voronezh Front and then Steppe Front for the Kursk salient.

Tigers were organised into heavy panzer battalions of three or four companies. Four Tigers formed a zug (platoon) and three or four zugs formed a kompanie (company). Tanks in a zug often moved and worked in pairs.

By the summer of 1943 the various models of T-34/76 were very familiar to the Wehrmacht. The German evaluation of the T-34 during the winter of 1941-42 in effect advised, 'copy it'. The result was the Panther.

The Tiger was less known and understood by the Red Army, but an intact Tiger had been captured near Leningrad in January 1943 and

"WHEN THE GERMANS FIRST ENCOUNTERED THE T-34 THEY WERE HORRIFIED AS THEY HAD VIRTUALLY NO ANTI-TANK GUN CAPABLE OF DESTROYING IT"

thoroughly analysed at the testing ground at Kubinka. Among the conclusions reached was that the T-34 would have to be up-gunned from the 76mm weapon that was its main armament. The result, the T-34/85, was not available in time for Kursk, so the Red Army would be reliant on the T-34/76.

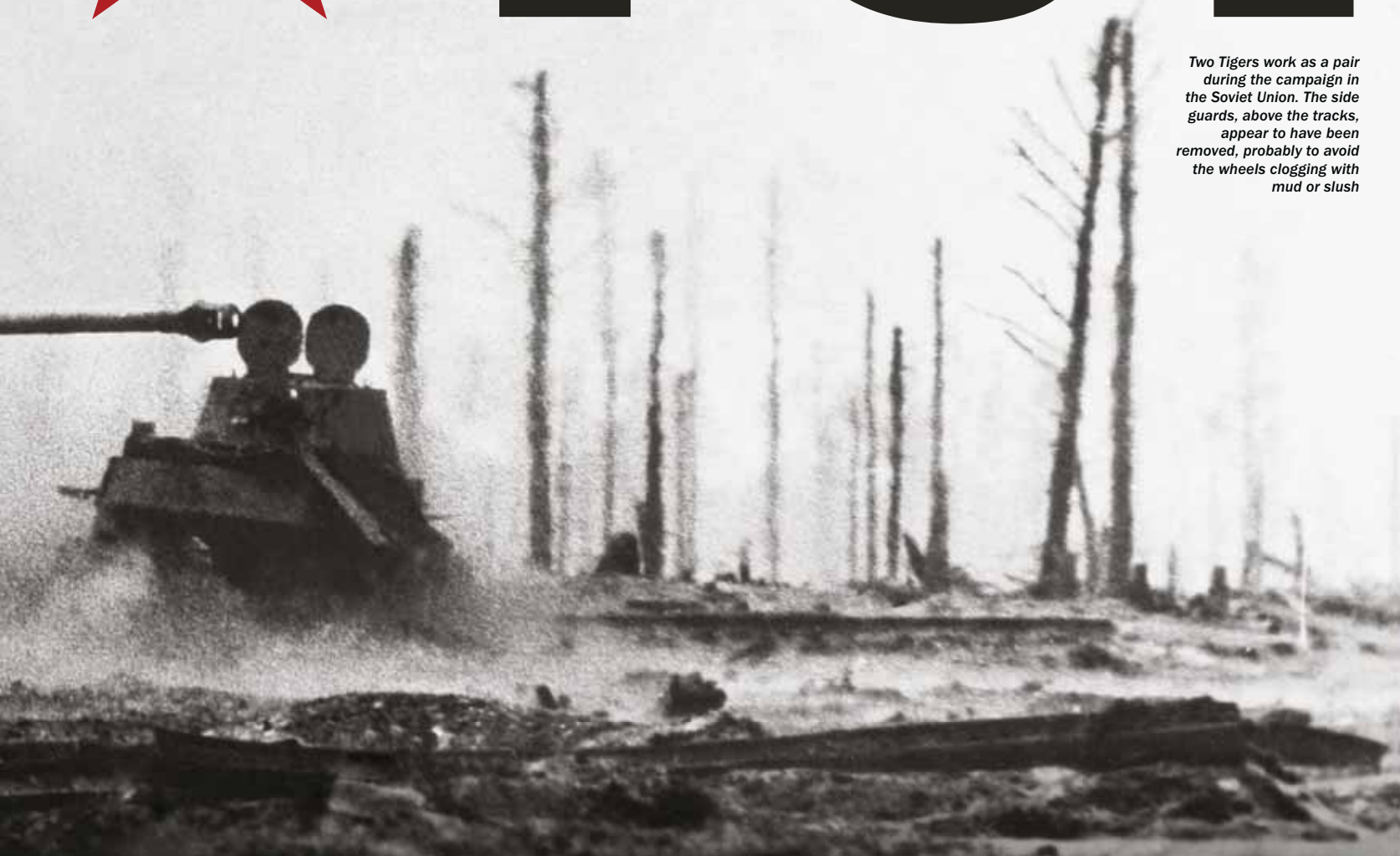
The Soviet armoured fist

When the Germans first encountered the T-34 they were horrified as they had virtually no anti-tank gun capable of destroying it. However, primitive tactics, poor training and maintenance and a lack of logistical support, particularly fuel, cost the Red Army its advantage. Gradually, experience improved all these shortcomings. When the T-34 with an 85mm gun was introduced later in 1943 they once again regained superiority, as it addressed



T-34

Two Tigers work as a pair during the campaign in the Soviet Union. The side guards, above the tracks, appear to have been removed, probably to avoid the wheels clogging with mud or slush



many of the main problems that earlier experience had highlighted.

The T-34 was developed when the need for a medium tank became apparent in the late 1930s. One of the major specifications was ease of mass-production. From the various prototypes the A-32 was chosen, which became known as the T-34. Production began in the spring of 1940 and, when the 76 version was phased out in 1944, roughly 35,500 had been built. Stalin had, in late 1941, vetoed any major alterations to the T-34 in order to simplify and increase production. Nevertheless, modifications were carried out as evacuated factories slowly came back into production during 1942-43, and supplies of items such as radios and optics were soon improved. Consequently, at Kursk the T-34 was a tried and thoroughly tested machine with a wealth of spares that were easy to replace.

Conversely, if one of the Tiger's internal overlapped wheels was damaged, the mechanics had to remove up to eight wheels and undo 45 bolts. Naturally, this was carried out after raising the tank and loosening the track. Of course, all these actions were then performed in reverse. This operation on a T-34 was considerably easier.

“TACTICS, POOR TRAINING AND MAINTENANCE AND A LACK OF LOGISTICAL SUPPORT, PARTICULARLY FUEL, COST THE RED ARMY ITS ADVANTAGE”

T-34s were organised into platoons of three, with three platoons making a company and three or four companies a battalion. A tank brigade, comprising two or three battalions, was usually the smallest formation that carried out independent missions. Crewed by four men (and sometimes women), the task allocation was: driver/mechanic, machine gunner/radio operator (when fitted), loader and commander. With the radio located to the right of the hull machine gun and with the commander in the turret, external communications depended on the radio operator relaying information and orders via the poor quality intercom to the commander. However, the tank commander was also the gunner, and this vital task obviously detracted from his ability to command.

Considerable responsibility was placed on the driver to keep up with the unit, avoid

problematic terrain and generally be aware of the often-chaotic situation around them. The loader simply loaded, which in itself was a physically exhausting task, as the bulk of the tank's 100 rounds of ammunition (each weighing roughly nine kilograms, or 20 pounds) was stored in the floor of the tank. As one T-34 commander, having ordered up a round, recalled, he looked around only to find, "the loader laying, lights out, on the ammo boxes [below him]. He'd been poisoned by the fumes and lost consciousness."

Being overcome by the fumes from when the gun fired was a problem caused by the poor positioning of the fan that was supposed to ventilate the vehicle. Equally problematic for the loader was the lack of room in the turret, as the gun's breech was long, and if the turret were rotated it could easily knock him out or cause other injuries.

The commander's gunnery tasks were also difficult. First he would find his target through the periscope, then use the separate gun sight to aim – two actions that used valuable time.

If the loader were quick, the round went in and the gun was fired. Unfortunately, during training tankers did not get much firing practice at anything other than stationary targets, and consequently gunnery was not an exact science for the crews. Indeed, at Prokhorovka the orders issued to the tankers were simple: drive at the enemy fast, in order to reduce the

range, fire upon approach, and use the terrain to mask the approach. Weighing 28 tons when carrying fuel and ammunition, the T-34 was certainly fast and manoeuvrable. However, it also suffered from abysmal optics and a lack of viewing ports, leading the Germans to describe its crew as 'blind', which, when combined with the commander's combined role as gunner, contributed to a dangerously low awareness of the combat environment.

'Spartan' would be the most complimentary way to describe the T-34's interior from a crewman's point of view. The position of the driver's and machine gunner's seats was awkward and uncomfortable, making the driver's job in particular physically exhausting. When Fifth Guards Tank Army (GTA) drove 400 kilometres (248 miles) to reinforce Voronezh Front, drivers had to be lifted out of their positions by their comrades and massaged back to something near physical normality.

These men and women had driven their tanks at night over the course of three days to retain the element of surprise, as well as helping to avoid Luftwaffe attacks. Mentally the effort must have been shattering. No records are available for the number of vehicles that broke down en route, but clearly the vast majority reached their objective. Given the poor reliability of the Tiger's engines it seems rather unlikely that as many of the German tanks would have made it.

"BEING OVERCOME BY THE FUMES FROM WHEN THE GUN FIRED WAS A PROBLEM CAUSED BY THE POOR POSITIONING OF THE FAN THAT WAS SUPPOSED TO VENTILATE THE VEHICLE"



Tigers on a runway in 1944. The Zimmerit paste, used to prevent magnetic mines from attaching, can clearly be seen on the tanks

A line of T-34s advance on Prokhorovka during the Battle of Kursk



T-34s were often used to help move soldiers forward rapidly over rough or exposed terrain





T-34 TECH SPEC

ARMAMENT

From February 1941 the main gun was the F-34 76.2mm, capable of firing armour piercing, HE and shrapnel rounds. There were two 7.62mm machine guns, one hull-mounted and one mounted co-axially with the main weapon. In earlier models 77 shells were carried, nine of which were stored in the turret itself and the remainder in containers that formed the deck beneath the turret. Of these 21 were AP. When the hexagonal turret was introduced the number of shells increased to 100, with 14 placed in the turret. The kill range when faced by a Tiger's thick frontal armour was under 500m (547yd).

ENGINE

All models mounted the V2 diesel engine with a top speed of 47kph (29mph) on the road, and 36kph (22mph) off-road.

FUEL CAPACITY

Internally, 610l (135gal) was in eight fuel tanks built into the hull of the vehicle. From the 1943 model onwards up to three external fuel cylinders were attached to the outside of the hull to the rear, which carried a further 270l (59gal). Prior to that, two external fuel boxes were attached to the hull at the rear of the engine compartment. Range on the road was 380km (236mi), and off-road 260km (161mi).

ARMOUR

FRONT PLATE 45mm sloped at 60°

TURRET 45mm (1.77in) sloped at 30°

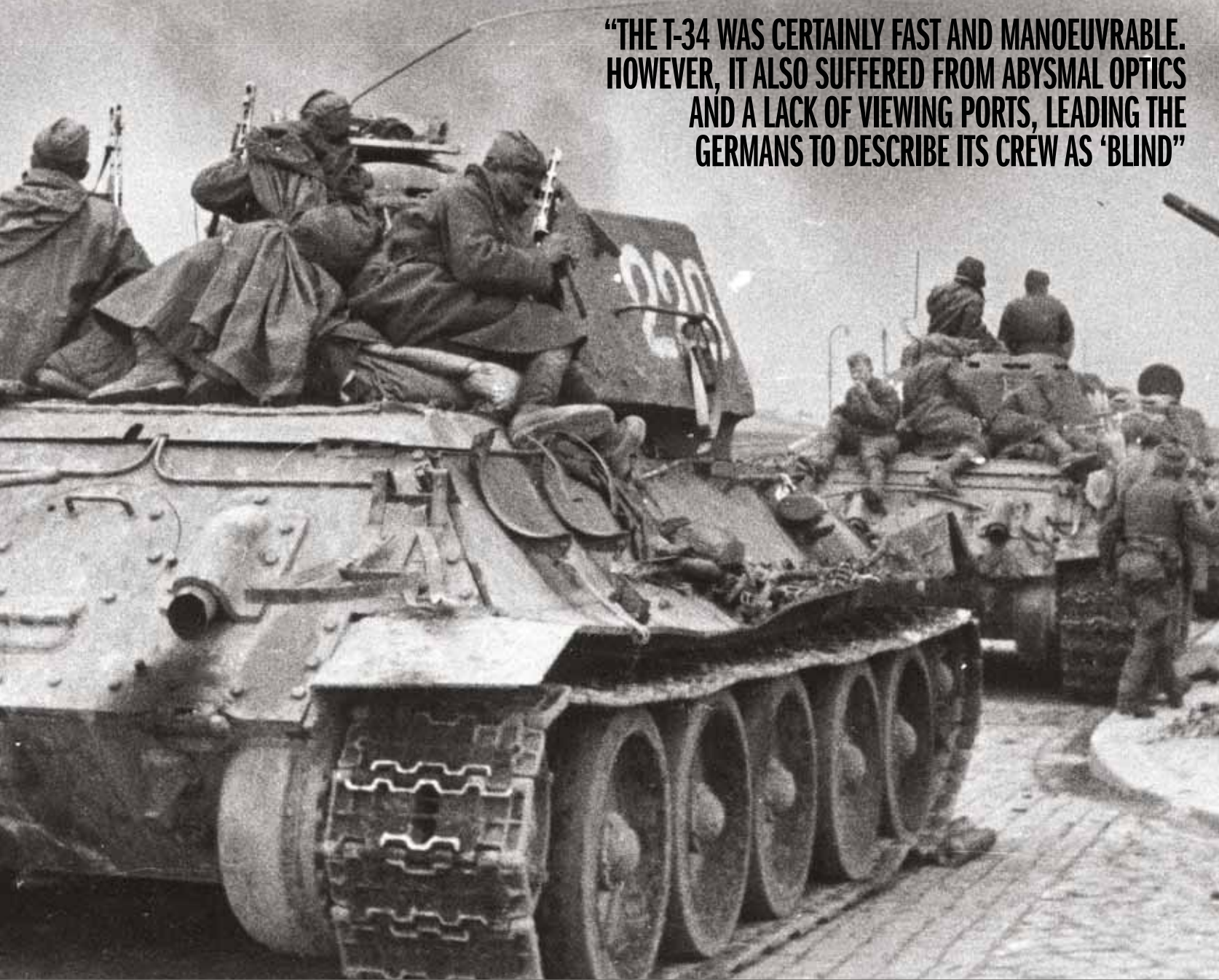
GUN MOUNTING 85mm (3.35in)

SIDES 40mm (1.57in) sloped at 40°

REAR PLATE 40mm (1.57in) sloped at 48°

FLOOR 16mm (0.6in) under the crew, 14mm (0.55in) under the engine

"THE T-34 WAS CERTAINLY FAST AND MANOEUVRABLE. HOWEVER, IT ALSO SUFFERED FROM ABYSMAL OPTICS AND A LACK OF VIEWING PORTS, LEADING THE GERMANS TO DESCRIBE ITS CREW AS 'BLIND'"



*Men and machines lie
wrecked in the scarred
battleground of Kursk*



“INTERNALLY THE TIGER WAS CONSIDERABLY MORE SPACIOUS. IT WAS ALSO PAINTED, WHICH SPARED THE CREW THE DANGER OF INJURY FROM FLYING METAL SHARDS WHEN A SHELL HIT THE MACHINE”



GERMANY'S BIG CAT

The Tiger was conceived as a heavy tank of the type known as 'breakthrough tanks'. However, development was slow and, having gone through a series of prototypes, two competitors for the contract were identified – one produced by Porsche, the other by Henschel. The Henschel Tiger went into production in August 1942 and production ended two years later, after 1,350 had been built.

One major derivative, the Tiger II, was developed from original, and the others were largely irrelevant. The Tiger certainly fulfilled the 'heavy' part of the brief, weighing in at some 56 tons fully loaded. This meant that to cross water obstacles it would require a 60-ton-capacity bridge, which were few and far between. Despite the first 495 Tigers having a built-in snorkel, climbing out of the water onto a progressively more saturated bank negated this accessory.

The simple question of how to move a damaged machine of this weight seems to have been overlooked. It required at least two heavy-duty prime movers to haul one Tiger out of a ditch or simply into a position where the repair crews could get to work. Furthermore, German eagerness to get the Tiger into action had prevented the accumulation, not to mention the distribution, of spare parts.

Consequently, when the dense Soviet minefields began to take their toll, basic items such as track pins were unavailable to the maintenance companies. This resulted in the cannibalisation of other damaged Tigers to keep at least some in action. This problem was brought into sharp relief when on the first day of Operation Citadel, 5 July, 13 out of 14 tanks of the Tiger company attached to 19th Panzer Division were put out of action due to

mines. Indeed, such were the repair problems faced by AGN's Tiger Battalion that by 6 July, just the second day of fighting, half of its Tigers were out of commission and a request was sent to the factory in central Germany for 10 transmissions and engines, as well as more basic parts. These were eventually flown in and, on 9 July, the battalion withdrew for repairs.

However, the Tiger was well provided with radio and intercom equipment both for external and internal communications, as well as excellent optics and a good number of vision ports, so an alert commander would have a better awareness of events around him than his Red Army counterpart. Responsibilities for the five-man crew was broken down as commander, gunner, loader, driver and radio operator/hull machine gunner. This is clearly a more sensible arrangement than in the T-34. Internally the

"THE TIGER CERTAINLY FULFILLED THE 'HEAVY' PART OF THE BRIEF, WEIGHING IN AT SOME 56 TONS FULLY LOADED"

A Tiger, accompanied by infantry, advances in January 1944. Its wide tracks made it better-suited to operate in snow and mud



Tiger was considerably more spacious. It was also painted, which spared the crew the danger of injury from flying metal shards when a shell hit the machine, unlike the T-34, the inside of which was bare metal. In the event of a driver being disabled or killed the machine gunner was expected to haul the casualty out of the way and take over – a difficult task given the lack of space. In a Tiger there was more room for the grim but vital task.

As a result of the experience gained at Kursk – where tank-hunting infantry teams worked to attach magnetic mines to the hull of a tank if it was travelling slowly or bogged down – Zimmerit paste was applied to the Tiger (and other tanks) from August 1943 onwards, in order to prevent magnetic mines from attaching.

TIGER TECH SPEC



ARMAMENT

An 8.8cm KwK 36 gun, two 7.92mm machine guns, one co-axial, the other hull-mounted, to the right of the driver. 92 rounds of high explosive and armour piercing shells were carried. Effective range: at 2,000m (2,187yd) there was a 50 per cent probability of a kill when striking the 45mm sloped frontal armour of the T-34. This increased if the side or rear plates were hit. The commander of the Liebstandarte Tiger Company noted the ideal range for a good Tiger gunner was 800m (875yd) giving a 100 per cent chance of a kill.

ENGINE

The Tiger was powered by a Maybach petrol engine that produced a maximum road speed

of 44kph (27mph) with that performance halved off-road.

FUEL CAPACITY

568l (125gal) internally stowed next to the engine compartment. Range on the road was 117km (73mi), and off-road 68km (42mi).

ARMOUR

FRONT PLATE 100mm (3.9in) sloped at 80°

TURRET 82mm (3.2in)

GUN MOUNTING 110mm (4.3in)

SIDES 80mm sloped at 90°

REAR PLATE 82mm sloped at 82°

FLOOR 26mm (1in)



KILLS & LOSSES

The debate and research concerning this topic continues to exercise the minds of historians. No single source can really claim to be definitive as both sides had their own reasons for overstating their 'kill' count. The Soviets inflated their numbers, particularly of Tigers, to justify their own severe losses. The Germans did so for the simple reason that they lost. Equally problematic is the definition of a 'kill': does it mean a track blown off, the turret blown off, or the vehicle sinking into the mud up to the track tops and being abandoned? Furthermore, some Russian researchers in the post-Soviet world have reflected their anti-Communist stance to inflate Red Army losses. Here is not the place to enter this complex discussion.

There was something in the region of 95 Tigers operable with AGS on 4 July, and by 15 July, when

"STALIN, NOT GENERALLY FUSSED OVER CASUALTIES, ALMOST PUT GENERAL ROTMISTROV (COMMANDER OF FIFTH GTA) ON TRIAL FOR HIS COMMAND'S LOSSES AT PROKHOROVKA"

In part the confusion and controversy concerning losses can be understood in this images of wrecked Panzer IVs. With the turret encircled with an armoured screen it would appear to be a Tiger I. It is not surprising that Soviet tankers, keen to impress in the heat of battle, would lodge a claim for a Tiger kill when it was a Panzer IV

AGS halted and the last blow of Operation Citadel had been struck, there were 63 available. However, the Soviets did not consider the fighting in the Kursk Bulge (as the Russians call it) on the southern face over until 23 July and so continued to count kills.

AGC's Tiger losses, from the 31 tanks committed on 5 July, are awkward to assess as the records of Ninth Army are difficult to access. However, on 10 July there were 26 still operational. By 12 July AGC had shot its bolt and the Soviets had unleashed Operation Kutuzov that aimed to destroy AGC. Judging by those figures, 37 Tigers were irretrievably lost by both AGS and AGC.

Keeping score for the T-34 was less problematic as it was a familiar and easily identified vehicle. The three fronts involved, including armour from Steppe Front, committed 2,730, of which 854 were lost by Voronezh and Steppe Fronts, but only 175 by Central Front. This simply reflects the different commitment levels of armour on the northern and southern faces of the salient. It must also be remembered that at the end of operations the Red Army was in a position to pick over the remains of its tanks and restore what was worth saving, whereas the Germans were not. Soviet tank crews were paid a bonus of 1,000 roubles for every confirmed kill. Interestingly Stalin, not generally fussed over casualties, almost put General Rotmistrov, commander of Fifth GTA, on trial for his command's losses at Prokhorovka.

ON THE BATTLEFIELD

ARMY GROUP NORTH

Most accounts of Operation Citadel focus on the movements of AGS due to the battle of Prokhorovka. Consequently, the rather less well-known activities of AGN are often overlooked, as is the deployment of the 31 Tigers of Heavy Panzer Battalion 505. However, 505 was only joined by its third company on 8 July, hence its lower numbers.

ARMY GROUP SOUTH

Each of the three SS Panzer Grenadier divisions of II SS Panzer Corps – Liebstandarte, Das Reich and Totenkopf – had an integral Tiger company. Additionally, the Grossdeutschland Panzer Grenadier Division had its own 15-machine Tiger company. Heavy Panzer Battalion 503 was a part of III Panzer Corps under Army Detachment Kempf: it was split up, with one company each going to 6th, 11th and 19th Panzer divisions.

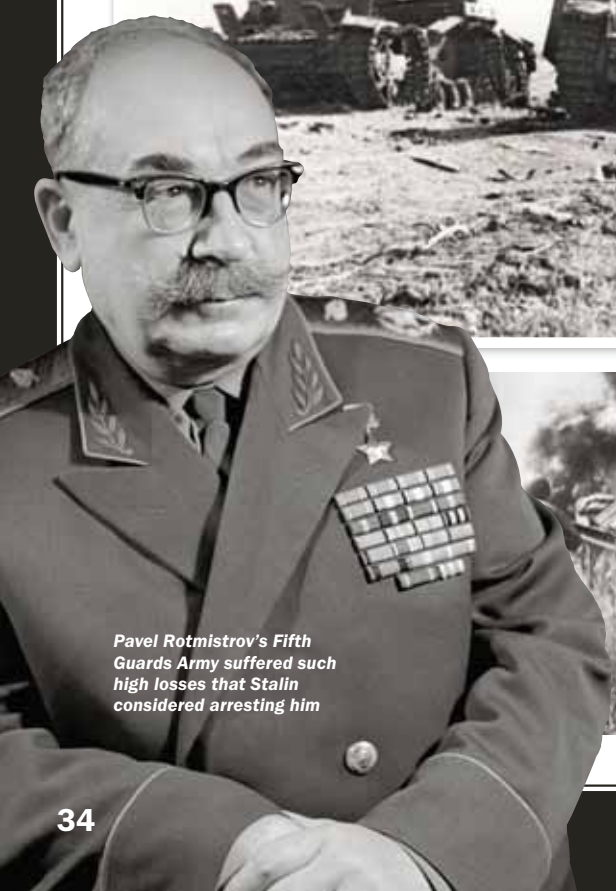
THE T-34

The deployment of the T-34 was universal. Other than some specialist heavy tank formations almost every Soviet armoured formation included them.

The major units were the three tank armies that were engaged in the defensive phase of the Kursk fighting. First Tank Army was part of Voronezh Front, Second Tank Army subordinated to Central Front and Fifth GTA was held in reserve as part of Steppe Front. In addition, separate tank formations were allocated to the various armies of both Central and Voronezh Fronts. The bulk of these units were formed of T-34s. Voronezh Front counted 946, of which First Tank Army held 477, V Guards Tank Corps 127, Seventh Guards Army 114. These were supported by a further 584 in Fifth GTA, II and X Tank Corps.

Central Front deployed roughly 1,200 T-34s, split between Second Tank Army, IX and XIX Tank corps.

"TANK CREWS WERE PAID A BONUS OF 1,000 ROUBLES FOR EVERY CONFIRMED KILL"



Pavel Rotmistrov's Fifth Guards Army suffered such high losses that Stalin considered arresting him





FRONT LINE

BRYANSK

ARMY
GROUP
CENTRE

OREL

BRYANSK
FRONT

FRONT BOUNDARY

PONYRI

CENTRAL
FRONT

KURSK

FRONT & ARMY GROUP BOUNDARY

PROKHOROVKA

VORONEZH
FRONTSTEPPE
FRONT

SUMY

BELGOROD

FRONT BOUNDARY

ARMY
GROUP
SOUTH

KHARKOV

SOUTH
WESTERN
FRONT

FRONT LINE

DEPLOYMENT
MAP KEY

GERMAN UNITS

1. 503rd Heavy Tank Battalion
2. Panzer Grenadier Division
Grossdeutschland
3. SS Panzer Grenadier Division
Liebstandarte
4. SS Panzer Grenadier Division
Das Reich
5. SS Panzer Grenadier Division
Totenkopf
6. 6th Panzer Division
7. 19th Panzer Division
8. 7th Panzer Division

SOVIET UNITS

1. 251st Tank Regiment
2. 259th Tank Regiment
3. 240th Tank Regiment
4. Second Tank Army
5. 237th Tank Regiment
6. 129th Tank Brigade
7. 27th Guards Tank Regiment
8. V Guards Tank Corps
9. VI Tank Corps
10. XXXI Tank Corps
11. First Tank Army
12. III Motorised Corps
13. 96th Tank Brigade
14. II Guards Tank Corps
15. Fifth Guards Tank Army



Above: T-34s move forward at Kursk, closely accompanied by infantry, who had hitched a ride on the tanks



A burned-out T-34, watched by two SS men, July 1943. Soviet tankers were only allowed to abandon their vehicle if it were on fire or the main gun was inoperable. The punishment for those who did so at any other moment was severe. This vehicle has clearly burned out, the rubber tyres are melted and the turret hatch appears to be closed, suggesting the crew died inside



'Desant' infantry are mounted on the tanks. Lacking armoured personnel carriers and trucks with speedy cross-country performance, the Red Army used tanks to carry infantry into the attack. When their objective was reached the infantry would leap boldly off and into action. What a trip was like at 30kph, over rough terrain and under fire, is not difficult to imagine



The Tiger that never was. Henschel won the contract for the Tiger, and the rejected prototype, made by Porsche, was available in chassis form. Rather than waste these assets it was decided to use them as heavy jagdpanzers (tank hunters) by the addition of an 88mm Pak 43 gun in a heavily armoured superstructure. Roughly 90 were deployed with Ninth Army, where their performance was mixed. The vehicle shown here is being inspected by senior Russian officers



"TWO T-34S WERE USED BY SIXTH PANZER DIVISION TO DECEIVE THE DEFENDERS OF A VITAL BRIDGE SOUTH OF PROKHOROVKA INTO NOT FIRING – THE DECEPTION SUCCEEDED, ALLOWING THE TIGERS TO CROSS"



In late 1941 and early 1942 add-on hull armour plates were welded to T-34s as a response to improving German anti-tank guns. The plates were between 20-35mm (0.78-1.34in) thick and were non-uniform in shape. They were dropped in February 1942, possibly due to a shortage of spare armour plate



The camouflage colours of Yellow, brown and green were introduced on 18 February 1943. Prior to that date dark grey was the standard factory finish. Skirt armour to protect the tracks was not added to the Tiger to avoid it clogging with mud and to keep the weight down. The Tiger was the first German tank with wide tracks, which improved its ability to cope with mud and snow

TOP TANK?

The T-34 was a medium tank, the Tiger a heavy tank, therefore direct comparisons are absurd. The Tiger was well-engineered in a long-established factory, the T-34 was mass produced in often relocated, under-manned factories where numbers mattered more than quality or refinement. However, the T-34 series did lead to the up-gunned 85 version and the chassis was successfully used for the SU 85 and SU 100 tank destroyer versions, which were rather more flexible than the Tiger II (King Tiger) or the Jagdtiger. Furthermore, 20 T-34s served at Kursk with SS Panzer Grenadier Division Das Reich, which is testament to the esteem in which they were held. Two T-34s were used by 6th Panzer Division to deceive the defenders of a vital bridge south of Prokhorovka into not firing – the deception succeeded, allowing the Tigers to cross.

To counter this threat a substantial force was moved off from the main fighting to contain this bridgehead. According to Soviet records, some Tigers were taken into service with the Red Army during late 1943-44 but proved too difficult to maintain and were abandoned when they wore out. In the final analysis, the Red Army was victorious at Kursk and the T-34 was the tank that made it possible. As someone (Stalin by most accounts) said, "Quantity has a quality of its own." General Heinz Guderian, who witnessed a T-34 attack at Kursk on 10 July, compared it to, "rats streaming across the landscape". Bad luck for the cat.



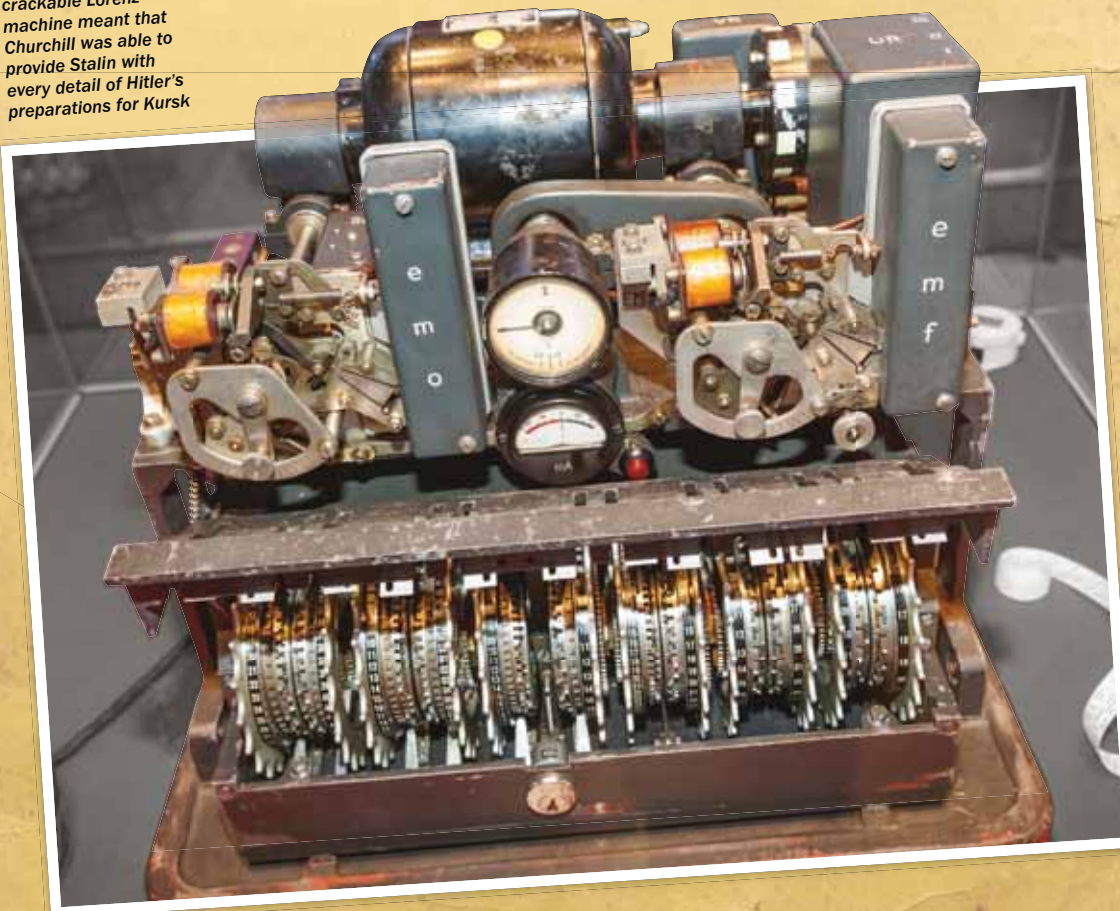
Into action, the Tigers of 505 Heavy Panzer Battalion move out with their accompanying Panzer IIIs. The attack formation would have the Tigers heading a panzerkeil (armoured wedge), to act as the breakthrough element of an attack that would be exploited by Panzer IIIs and IVs. This ideal formation was rarely employed during Operation Citadel. Other heavy Panzer battalions had begun to lose their Panzer IIIs, and the Tiger units were to be used without ancillary tanks

SPIES **OF** **OPERATION** **CITADEL**

In the spring of 1943 spy networks across Europe put Stalin firmly on the road to victory at the Battle of Kursk

WORDS ANTHONY TUCKER-JONES

Cracking the un-crackable Lorenz machine meant that Churchill was able to provide Stalin with every detail of Hitler's preparations for Kursk





In early 1943 Churchill supplied Stalin with weapons and vital intelligence. The Soviet dictator was not grateful and suspected Churchill of skulduggery

By 1943 the prognosis for the rejuvenated Red Army was good. This was despite friction between Churchill and Roosevelt on the one hand, and Stalin on the other over intelligence-sharing and the delivery of weapon supplies. The British Joint Intelligence Committee now doubted Hitler's chances of victory, assessing that "the prospect of a German defeat of Russia has receded to vanishing point". It also held the view that Hitler had passed the point where he could hope to reach a peace settlement with Stalin. Churchill was in agreement and wrote, "The Russians, both on land and in the air, had now the upper hand, and the Germans can have had few hopes of ultimate victory."

Thanks to the decoders at Britain's top-secret Bletchley Park, Churchill was forewarned that a battle was looming at Kursk that summer. Not only had Bletchley cracked Enigma, used by the German armed forces, but also the Lorenz system used by German High Command. He resolved to inform Stalin but was at pains to conceal the true source of this information. Captain Jerry Roberts, working at Bletchley, explained, "We were able to warn them what army groups were going to be used. And most important, what tank units were going to be used... We had to wrap it all up and say it was from spies, that we had wonderful teams of spies, and other sources of information."

It has been speculated that Bletchley intelligence was also deliberately passed through Rudolf Roessler and his 'Lucy' spy network in Switzerland, but there is no evidence

to support this. Churchill's warning was simply sent via diplomatic channels on 30 April 1943 to Moscow. Stalin did not altogether trust Churchill and it is doubtful he took much heed of Britain's efforts. After all, these simply confirmed what he already knew. Although Soviet military intelligence was aware of Bletchley Park, which they called 'Krugorot', they were unaware of the exact nature or indeed the scale of the work being conducted there.

Stalin was convinced that Churchill's help came with an agenda. In 1941 he had largely ignored Churchill's warnings about Hitler's impending invasion. His main concern was that if the Germans had broken the Soviet cypher system then the British had as well. However, Stalin had a spy right in the heart of Bletchley – Captain John Cairncross, known as 'Liszt,' who was passing large quantities of decrypts to the Soviet Embassy in London. He worked at Bletchley from 1942 until the summer of 1943, when he transferred to MI6.

Cairncross could not believe just how lax security was at Bletchley. Its boffins were daily intercepting and decrypting German, Italian and Japanese coded signals, yet the place leaked like a sieve. In contrast, bizarrely, when it came

to petty pilfering of the cafeteria crockery and the length of tea breaks, the authorities were positively draconian.

Stalin did not really need Churchill's official or Cairncross's unofficial help, as his own military intelligence was already well aware of Hitler's build-up around the Kursk salient. Ironically, the intelligence provided by Cairncross helped convince Stalin that the 'Lucy' spy ring was part of a deliberate German deception operation because some of their information matched.

It seems that Stalin could not accept or appreciate that Bletchley Park and his Swiss spies were actually drawing on the same sources within the German High Command.

Cairncross had decided that Churchill's government was not doing enough to help Stalin, so he had taken matters into his own hands. He was of the opinion that Bletchley

ought to share its intelligence with all its allies, not just the Americans. A Scottish Marxist, Captain Cairncross, known as 'The Fiery Cross' at Trinity college, had been recruited by Soviet intelligence in the late 1930s. He preferred to believe that the Soviet Union was a workers' utopia rather than a brutal totalitarian state. His early career in the Foreign Office and then

**"STALIN HAD A SPY
RIGHT IN THE HEART
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CAIRNCROSS... WHO
WAS PASSING DECRYPTS
TO THE SOVIET EMBASSY"**

SPIES OF OPERATION CITADEL

the Treasury had made him a valuable source of information.

At Bletchley Cairncross worked in Hut 3 and he regularly scooped the processed decrypts from the floor. Adding them to his own translations, he then hid them in his trousers. Curiously, Cairncross was never patted down by Bletchley's guards, nor did he seem particularly surprised that he always managed to find useful information on the floor, which would be of help to his foreign friends. Once at the local railway station he put the decrypts in a bag and travelled to London to meet 'Henry', his Soviet handler, whose real name was Anatoli Gorsky.

In particular he gained valuable information that showed Hitler was planning to pinch off the Kursk salient. What he did not know was that Leo Long, a military intelligence officer working in the War Office, was also leaking Bletchley intelligence on Kursk. He was doing so via Soviet mole Anthony Blunt, who worked for MI5. Despite initial fears that it might be part of a deliberate British deception plan, Soviet military intelligence deemed it to be 'very valuable'.

The Swiss network

Operating from Geneva, Sándor Radó, codename 'Dora', and Englishman Allan Foote developed a contact in Lucerne known as 'Lucy' via German émigré Christian Schneider. 'Lucy' was a German exile by the name of

Rudolf Roessler, who was a committed anti-Nazi with some extremely well-placed sympathisers within the German High Command and military intelligence.

By profession Roessler was a journalist and publisher who in the early 1930s had incurred the displeasure of the Nazis. He lived in fear of being handed over to Hitler's henchmen. By way of insurance he was also working for Swiss intelligence. Radó, Foote and Schneider, meanwhile, were spies working for Soviet military intelligence. Radó and his network knew secrecy was everything. For security purposes Schneider, codename 'Taylor', was Roessler's only point of contact. Although Switzerland was neutral, should the authorities discover them operating on Swiss soil they would arrest everyone.

Every time General Zeitzler, chief of the Army General Staff, asked for situation reports from the German armies around the Kursk salient it went through General Erich Fellgiebel. He was head of communications for both the armed forces and Army High Command. Along with his deputy, Lieutenant General Fritz Thiele, he was an ardent anti-Nazi. To some they were patriots trying to undermine Hitler, to others they were dangerous traitors intent on Germany's downfall. Every step Zeitzler took to formulate Operation Citadel was relayed by Fellgiebel to 'Lucy' in Lucerne and on to Moscow.

Admiral William H. Standley, US Ambassador to Moscow, caused an almighty row with Stalin on the eve of Kursk



By 1943 Bletchley Park's codebreakers had not only cracked Enigma, employed by the German armed forces, but also the German High Command's Lorenz codes

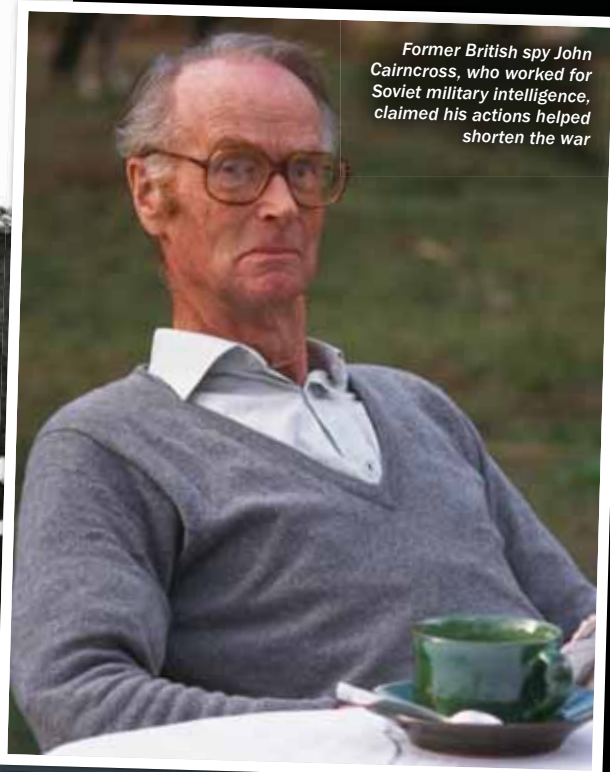




Rudolf Roessler, above, operating in Switzerland, was fed intelligence by anti-Nazi sympathisers in the German High Command



General Erich Fellgiebel passed intelligence to agents 'Lucy' and 'Dora' in Switzerland



Former British spy John Cairncross, who worked for Soviet military intelligence, claimed his actions helped shorten the war

The German General Staff and the Abwehr intelligence organisation had come to the conclusion that someone high up was aiding Stalin. Colonel Reinhard Gehlen, who was in charge of intelligence-gathering on the Eastern Front, noted, "Admiral Canaris [head of Abwehr] came to my headquarters at Anderburg one day and told me in the course of a lengthy conversation whom he suspected to be the traitor, though I believe that he knew more than he was prepared to tell me." Both were looking in completely the wrong direction. They convinced themselves, wrongly, that the traitor was Hitler's private secretary, Martin Bormann.

Having been contacted by Schneider, Radó had instructed Foote to radio Moscow to say, "Major German offensive at Kursk imminent." Schneider reassured him that more intelligence would be forthcoming regarding German troop deployments and timetables. If Hitler thought he was going to take the initiative he had another thing coming. If he tried anything at Kursk he would reap a bitter harvest.

The materiel link

During the beginning of 1943, under the cover of perpetual Arctic darkness, Churchill had pushed two supply convoys through to Russia, but with the return of the daylight he reluctantly postponed the March convoy. Then, under advice from the Royal Navy, he agreed that supplies by this route would stop until the return of darkness in the autumn. "This decision was taken with deep regret," Churchill wrote later, "because of the tremendous battles on the Russian front which distinguished the campaign of 1943."

Stalin was livid, as this would delay the delivery of 660 fighter aircraft. Only much later did Nikita Khrushchev acknowledge, "The English helped us tenaciously and at great

peril to themselves. They shipped cargo to Murmansk and suffered huge losses. German submarines lurked all along the way." Stalin cared little that the Americans and British were fighting a desperate convoy war in the Atlantic in order to supply their forces in North Africa and as part of the build-up for the second front.

Remarkably, in response to the American convoys bound for North Africa, Britain and the Soviet Union, the Abwehr established a sizeable spy network in Brazil. Washington used the country as a hub for air ferrying services and as a central location on the convoy routes. Brazil had a population of almost 1 million Germans, making it a fertile ground for espionage. Although this network suffered a collapse in 1942, the intelligence collected was clearly quite important, as the Abwehr attempted to set up two more groups in 1943.

Despite Hitler's best efforts, a lot of equipment was still reaching the Soviet Union. The Luftwaffe issued a secret intelligence report on 4 April 1943, assessing that around 1.2 million tons of supplies had come through the Arctic route compared to just half a million via the Persian Gulf and the Far East. It reported, "Besides raw materials, victuals and mineral oil, it included 1,880 aircraft, 2,350 tanks, 8,300 lorries, 6,400 other vehicles and 2,250 guns." These inevitably had an impact on the fighting on the Eastern Front.

"EVERY STEP ZEITZLER TOOK TO FORMULATE OPERATION CITADEL WAS RELAYED BY FELLGIEBEL TO 'LUCY' IN LUCERNE AND ON TO MOSCOW"

Although the Red Army viewed its Lend-Lease vehicles as a blessing and a curse in equal measure, there was no getting away from them. By 1943 20 per cent of Stalin's tank brigades had Lend-Lease vehicles, while around ten per cent were completely equipped with them. Of greatest value to the Red Army were the trucks and lorries, which greatly aided the Red Army's mobility. War correspondent Alexander Werth wrote, "From my personal observation I can say that, from 1943 on, the Red Army unquestionably appreciated the help from the West – whether in the form of Airacobras, Kittyhawks, Dodges, jeeps, spam, army boots, or medicines. The motor vehicles were particularly admired and valued."

Diplomatic rumblings

Aside from Churchill and Roosevelt, Stalin was particularly angry with US Ambassador Admiral William H. Standley. He, along with the American correspondents in Moscow, made it known that they felt the Soviet press and indeed the Soviet government was not showing enough gratitude for American and British help. Stalin was moved to write to Henry Cassidy of the Associated Press, saying rather tartly, "As compared with the aid which the Soviet Union is giving the Allies by drawing upon itself the main forces of the German Fascist armies, the aid of the Allies to the Soviet Union has so far been

SPIES OF OPERATION CITADEL

little effective." When this letter was published an affronted Standley flew to Washington to clarify exactly what had been sent and how much of it had been successfully delivered.

On his return to Moscow in January 1943 he made it his mission to get the Soviets to show some appreciation. None was forthcoming – not even from Foreign Minister Molotov. Two months later at a press conference Standley dropped a diplomatic bombshell, saying that the Russian people had no idea of the help they were getting, which would not encourage Congress to renew aid if it was not appreciated.

Soviet censors were enraged but were authorised by Stalin to issue Standley's statement on 9 March 1943. Stalin appreciated that a public relations war was going on and that for the sake of the bigger picture he needed to give ground. The chief censor, Kozhemiako, was furious, as his mother had died of starvation in Leningrad. One of his colleagues cursed, "We've lost millions of people, and they want us to crawl on our knees because they send us spam. And has the 'warmhearted' Congress ever done anything that wasn't in its interests? Don't tell me that Lend-Lease is charity." No one, though, was going to defy Stalin and the following day the

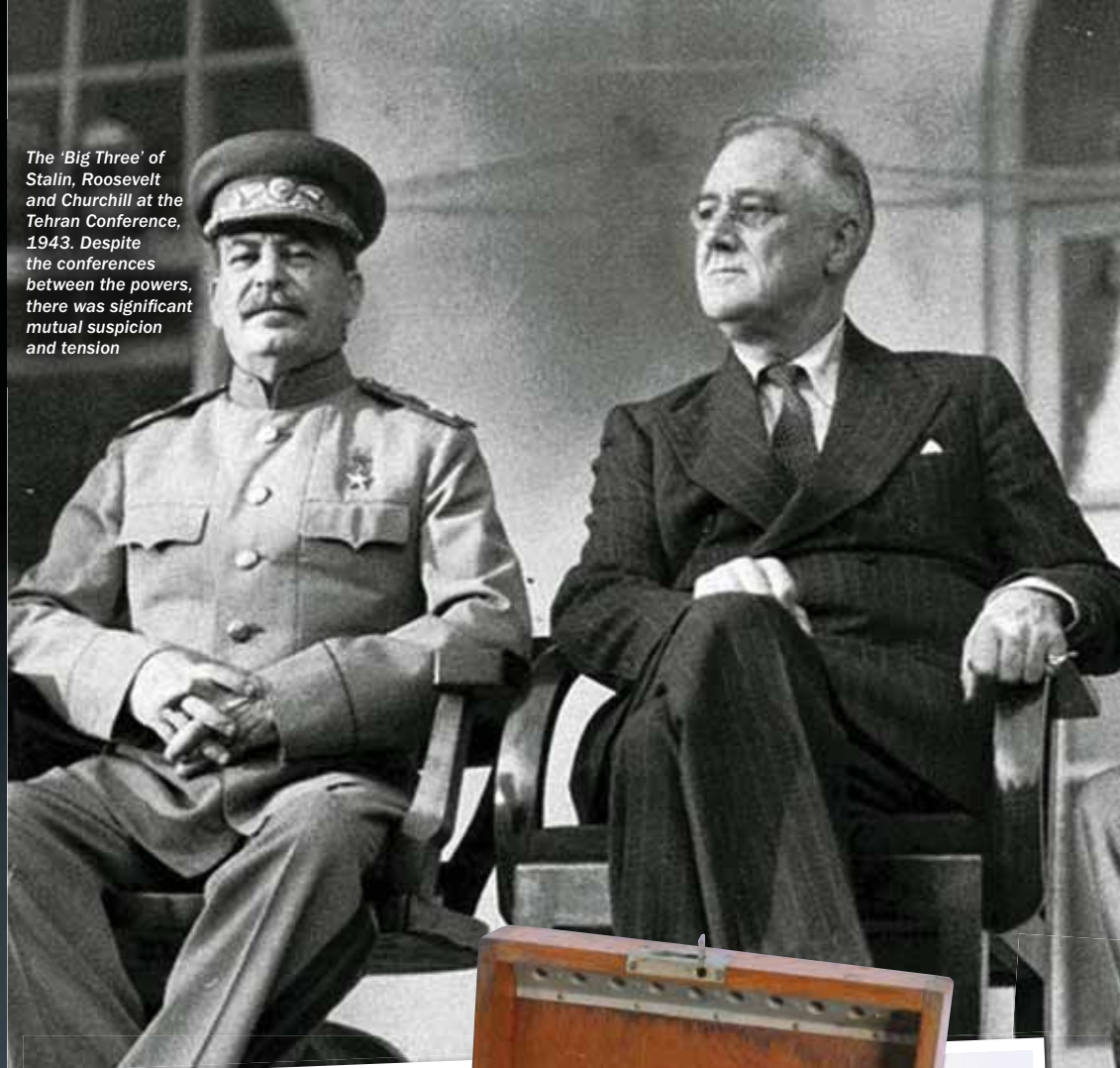
"STALIN, PUBLICLY AT LEAST, DESPISED SPIES AND DISPARAGED THEIR INFORMATION. HE SAW THEIR ACTIONS AS PURELY POLITICALLY MOTIVATED"

Soviet press began to report on the generous aid sent by their allies.

Despite the disparaging remarks about spam, like everything else it played its role in Stalin's war effort. "There were many jokes going around in the army, some of them off-colour, about American spam," recalled Khrushchev. "It tasted good nonetheless. Without spam we wouldn't have been able to feed our army. We had lost our most fertile lands – the Ukraine and the northern Caucasus." What he did not mention was that some of the canned pork was also sent to feed Gulag inmates.

It was very evident to Alexander Werth from his contacts that the USA's gifts were going to have an impact on the impending fighting at Kursk. He wrote, "On 11 June I recorded a conversation with a Russian correspondent who had just been to Kursk. He said the Russian equipment there was truly stupendous; he had never seen anything like it. What was also going to make a big difference this summer was the enormous number of American trucks; these were going to increase Russian mobility to a fantastic degree. The Russian soldiers were finding them excellent."

The 'Big Three' of Stalin, Roosevelt and Churchill at the Tehran Conference, 1943. Despite the conferences between the powers, there was significant mutual suspicion and tension



A four-rotor German Enigma machine. The Enigma was considered unbreakable, but Allied intelligence was able to crack its code and intercept messages





It is also possible that intelligence on Hitler's panzers was passed to Stalin by John Cairncross. His decrypts allegedly encouraged the Soviets to develop more powerful shells in response to German armament reports. It is likely that Bletchley was well aware of Hitler's constant demands for updates on his brand new Panther tank and Ferdinand tank destroyer. Certainly Churchill was alerted to what he called "the new 'Tiger' tanks". In light of the Tiger I appearing in the summer of 1942, it was hardly new by the summer of 1943 so he must have been referring to the Ferdinand.

Stalin was aware of the problems Hitler was suffering with Panther production thanks to the 'Lucy' spy ring and the wealth of classified intelligence it was providing. On 15 April 1943 Radó transmitted to Moscow Hitler's complete order of battle for Citadel. Just two days later he helpfully listed the creation of new panzer and infantry units. Then on 28 June Radó provided a summary of Panther manufacture, meaning Stalin knew that Hitler had just three or four battalions. Stalin, publicly at least, despised spies and disparaged their information. He saw their actions as purely politically motivated or based on financial gain: they could not be trusted. Nonetheless, what 'Dora' was saying was corroborated by intelligence from Soviet partisans behind German lines and by Red Air Force reconnaissance flights.

Even in Germany the preparation of these new weapons for Operation Citadel seemed to be common knowledge. Jewish academic Victor Klemperer, living in the city of Dresden, jotted down in his diary in early July, "We are now producing whole series of 'Tiger' tanks;

and all of it, arms and men, is going east on a massive scale, a train every fifteen minutes! Our offensive is sure to start in the next few weeks." Armed with such information, Stalin already had a low-tech solution to Hitler's panzers. "Because the Germans had much better quality equipment and super-tanks like the Tiger," said Captain Jerry Roberts, "the Russians needed greater quantities of armoured vehicles in order to compete."

Also on 28 June, courtesy of the 'Lucy' network, Stalin received the Luftwaffe's order of battle for Citadel. This meant the Red Air Force knew exactly what it was up against. John Cairncross claimed he played a role in Stalin's surprise pre-emptive air strike at Kursk. He said that the German language intelligence "I supplied was genuine, giving full details of German units and locations, thus enabling the Russians to pinpoint their targets and take the enemy by surprise". In the event, though, things did not go to plan in the air.

Churchill and Roosevelt, who had enough on their hands planning the Mediterranean campaign and the war in the Far East and Pacific, found Stalin's ingratitude perplexing. On 10 June Stalin wrote to Roosevelt with an air of petulance, saying, "You and Churchill have decided to postpone the Anglo-American invasion of Western Europe till the spring of 1944. Now again we've got to go on fighting almost single handed." He then tried bullying Churchill by warning, "The preservation of our confidence in the Allies is being subjected to severe stress."

This was the final straw for Churchill, who on 27 June 1943 pointed out that England had fought alone until June 1941. Then, bizarrely,

HITLER'S DILEMMA

Hitler simply did not have the resources to conduct a major summer offensive in 1943, but refused to let the initiative pass to Stalin. He wasted almost two months dithering over his decision to attack at Kursk. For Hitler the Russian salient was a tempting target to pinch off, yet at the same time the German bulges to the north and south were tempting objectives for Stalin. Major Otto Günsche, Hitler's adjutant, got the impression that Operation Citadel was the führer's idea. In reality General Zeitzler, chief of the Army General Staff, was the driving force behind it.

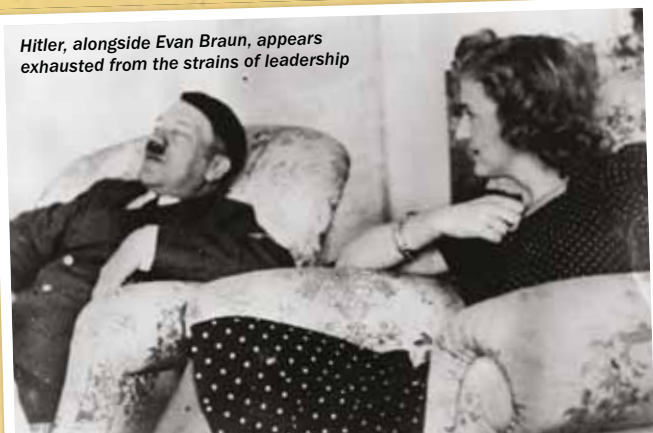
In early April 1943 Hitler announced, "The situation on the Eastern Front permits no large scale multi-directional offensive. We need to pull a few important pieces out of the Russian Front in order to gain the initiative again." Bending over his map, he declared, "Here, at Kursk, we have the opportunity of giving the Russians a blow and threatening Moscow again." Using a green pencil he drew two arrows, one from Orel and the other from Belgorod, meeting behind Kursk.

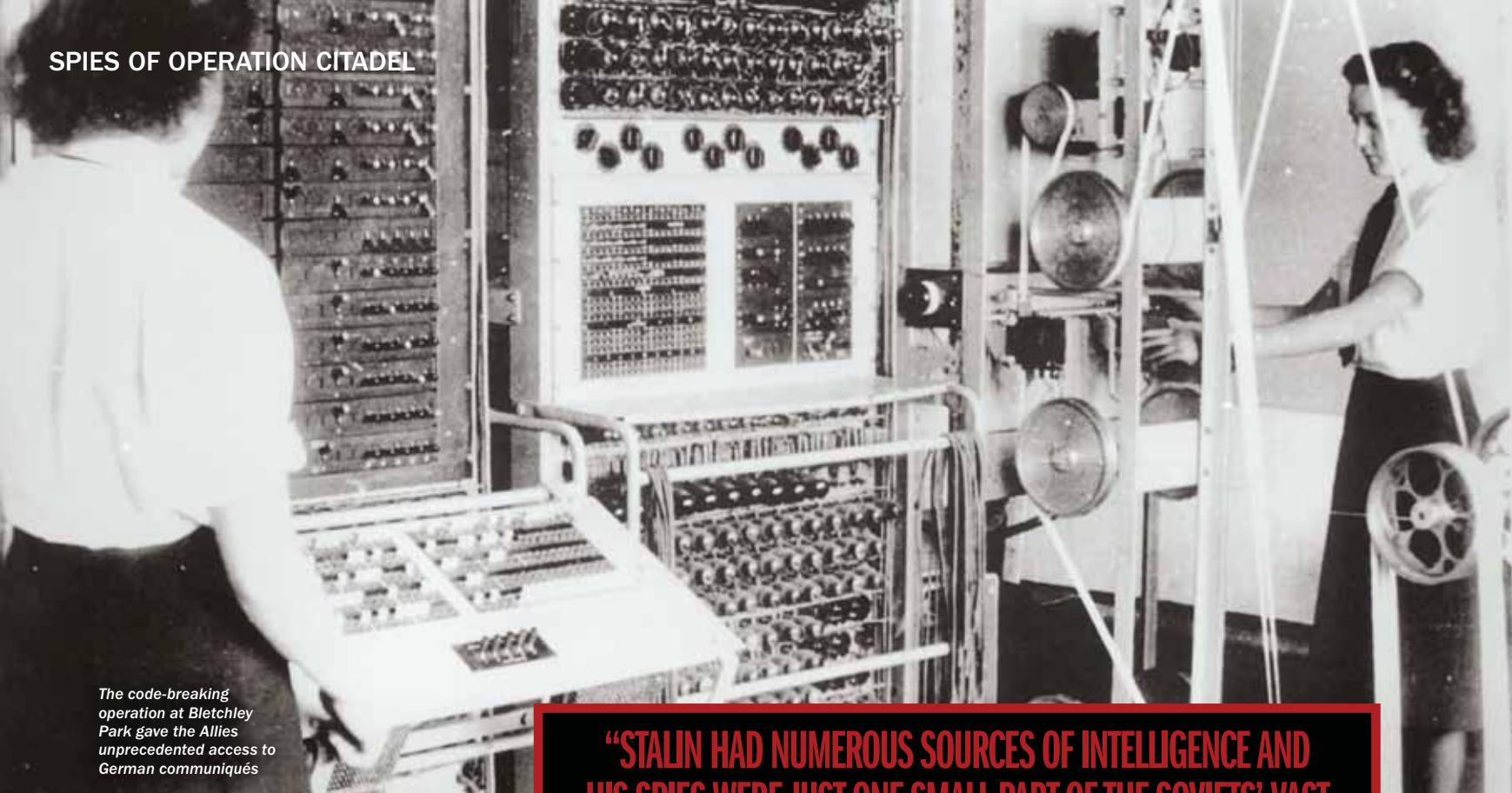
Publicly, Operation Citadel was born. At a meeting the following month Field Marshal Keitel, chief of High Command of the Armed Forces, argued, "We must attack for political reasons." General Heinz Guderian retorted, "It's a matter of profound indifference to the world whether we hold Kursk or not. I repeat my question: why do we want to attack in the East at all this year?" However, Hitler and Keitel were well aware that their Axis allies, Italy, Hungary and Romania, were wavering.

Hitler's unexpectedly honest reply did not engender any great confidence. Looking at Guderian, he said, "You're quite right. Whenever I think of this attack my stomach turns over." There was a moment's stunned silence. "In that case your reaction to the problem is the correct one," replied Guderian. Then, to emphasise his position he cautioned, "Leave it alone!"

Zeitzler was thoroughly fed up of waiting, and there seemed unending excuses for delaying Citadel – not least the Panther tank. Hitler was pressed to get a commitment that production would be ready by 10 June at the latest. "Otherwise," said Zeitzler, "let us begin the attack without them, or else use them in a counterattack". In the event Hitler slipped Citadel to 5 July 1943, by which time he was too late. Stalin had numerical superiority and his troops were extremely well dug-in. Hitler's men were fought to a bloody standstill then counterattacked.

Hitler, alongside Evan Braun, appears exhausted from the strains of leadership





The code-breaking operation at Bletchley Park gave the Allies unprecedented access to German communiqués

“STALIN HAD NUMEROUS SOURCES OF INTELLIGENCE AND HIS SPIES WERE JUST ONE SMALL PART OF THE SOVIETS’ VAST INFORMATION-GATHERING OPERATION”

and contrary to Bletchley intelligence, he said, “You may not even be heavily attacked by the Germans this summer. This would vindicate decisively what you once called the ‘military correctness’ of our Mediterranean strategy.” Quite what Stalin made of this message is anyone’s guess.

In Switzerland the ‘Lucy’ spy ring’s days were numbered. By June 1943 Foote was aware that he was being watched by the local police. Three months earlier the Abwehr had placed Radó and most of his co-conspirators under surveillance. He had not helped matters by having an affair with one of his female wireless operators, who was half his age. The women concerned was also seeing an Abwehr agent. Foote had wanted to reduce the rate of his transmissions but Moscow refused. Germany was now putting diplomatic pressure on the Swiss to arrest them, and it was becoming increasingly difficult for the authorities to turn a blind eye. In terms of Kursk, though, their work was more than done.

An intelligence victory?

Just how much value did Stalin gain from his spies in Britain and Switzerland? While their espionage work was exciting and dangerous, the answer is very little. By the time decrypted intelligence reached Moscow it was often days if not weeks out of date. John Cairncross, Leo Long and Anthony Blunt liked to think they were instrumental in changing the course of the war. This was a deluded view. Sándor Radó and Rudolf Roessler were fed information direct from the German High Command, but whether this was better than the intelligence gained from the Lorenz decrypts at Bletchley is unknown. Stalin had numerous sources of intelligence and his spies were just one small part of the Soviets’ vast information-gathering operation.

Churchill’s understandable reluctance to reveal the source of his intelligence

inevitably did little to enhance its credibility in the eyes of the Kremlin. Furthermore, by the time intercepts had been decrypted, units were often long gone, having been redeployed elsewhere. Stalin got much better intelligence from his partisans behind enemy lines monitoring German-controlled airfields, railways and roads. Likewise, the Red Army ran its own radio intercept operations and the Red Air Force conducted regular photographic reconnaissance flights.

Nonetheless, the role of Enigma and Lorenz-derived intelligence passed to Stalin officially or unofficially should not be completely dismissed. If Moscow was never ready to acknowledge the part played by Lend-Lease equipment, then it was certainly never going to accept it won the war because of British and American-supplied intelligence and information.

Codebreaker Captain Jerry Reynolds was in little doubt that information supplied by Bletchley Park played a vital part in shortening the war and hastening Hitler’s final defeat. He pointed out that Churchill “gave the Russians full details of the plans three months before the battle took place and allowed them to deploy the maximum number of tanks and win the Battle of Kursk.”

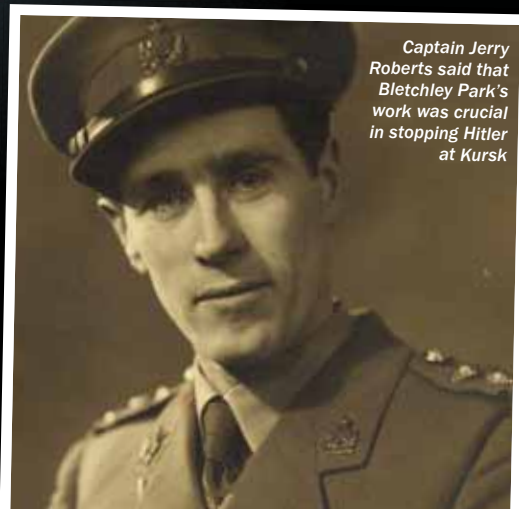
Until his dying day Reynolds championed the unsung heroes of Bletchley: “Most people in Britain are unaware of the Kursk story and its enormous significance, and of the major contribution made by the Lorenz decrypts to its successful outcome. I wonder whether the Russian authorities ever realised the importance of the help that Britain had given.”

It is very notable that Russian generals Khrushchev and Zhukov said that they were tipped off that Citadel was about to commence

against both the Central and Voronezh Fronts by prisoners captured just hours before. It is highly improbable that lowly privates from the German army and the Waffen-SS would be privy to such information. Even if they were, it seems a convenient coincidence that the two fronts received the same warning at about the same time from the same type of source.

It may be that Khrushchev and Zhukov wanted a plausible reason for opening fire before Hitler attacked. Could it be that Stalin and his commanders already knew the exact day and hour that Operation Citadel was due to commence? This is more than likely. Was this knowledge derived from Bletchley’s intelligence? It is impossible to tell. Besides, Stalin would never have acknowledged such timely assistance.

Ultimately the battle had been brewing for months, and for the Red Army it was just a case of sitting tight until such time as Hitler chose to attack. Certainly a man with secret documents stuffed down his trousers was not really going to have much bearing on such decisive events.



Captain Jerry Reynolds said that Bletchley Park’s work was crucial in stopping Hitler at Kursk

Images: Alamy, Getty



CROMWELL TANK

MODEL MILITARY VEHICLES TREMENDOUS TANKS



CHALLENGER TANK SPECIFICATIONS

 4	 m 11.5	 m 2.49
 m 4.2	 kg 62.5T	 km/h 59
 B km A 450	 hp 1200	 mm 120
 Perkins CV-12 V12 Diesel 26 litre		

Dominating the battlefield for 100 years, the tank was initially designed to break the stalemate of trench warfare and provide infantry units with a mobile, armoured base of fire that would give them a significant tactical advantage. Since that time, the tank has developed into an essential component of any integrated military force, whilst always challenging designers to find new ways of combining effective fire-power with greater speed and mobility – in the world of tank warfare, bigger is not always better.

First introduced by the British during the Battle of the Somme on 15 September 1916, the tank was developed under the utmost secrecy for fear of alerting the Germans to these decisive new weapons. Originally known as

Landships, workers involved in their production were told that the vehicles were nothing more than mobile water tanks for use in the desert war. As military planners looked for a suitable code word for the new machines, the word tank was adopted.

As the tank developed, it would become a crucial component of German Blitzkrieg during WWII, as they perfected the use of fast moving armoured vehicles to back up infantry assaults, following devastating aerial bombardment. Today's tanks can trace their lineage back to the first British Mark I machines of the Somme Offensive and will still be found at the spearhead of any ground based military operation.

Airfix kits allow you to recreate hundreds of different iconic aircraft, tank and car scale models in the comfort of your own home. Airfix produce a wide variety of tanks and military vehicles in a variety of different scales and schemes. Within the Airfix range, alongside the classic kits, there is a Cromwell MkIV Tank Starter Set which contains glue, paintbrush and 4 acrylic paints, everything you need to create a stunning 1:76 scale model.

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A55109 CROMWELL MkIV TANK STARTER SET 1:76



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A50009 BATTLEFRONT GIFT SET 1:76



PANZERKAMPFWAGEN V PANTHER

Perhaps the finest all-around tank of World War II, the German Panther was designed in response to the Soviet T-34

WORDS MIKE HASKEW

The appearance of the superb T-34 medium tank in Soviet armoured formations at Mzensk in 1941 came as a shock to German field commanders and led directly to the development of the PzKpfw. V Panther, considered by some military analysts to be the finest armoured fighting vehicle of World War II.

While research and the development of a tank had been underway since 1937 to replace the PzKpfw. IV, the workhorse of the Wehrmacht and SS armoured formations, the pace quickened following encounters with the T-34. The German Armaments Ministry issued specifications for a medium tank with sloped armour, substantial wheels and tracks for enhanced cross-country mobility, and the capability to mount the long-barrelled 75mm KwK 42 L/70 cannon. Prominent German armaments manufacturers, including Maschinenfabrik Augsburg-Nürnberg AG (MAN), Porsche, Henschel and Daimler-Benz vied for the lucrative contract and submitted designs.

Competition was intense, and in the spring of 1942 the MAN design, known as the VK 3002, was chosen over the Daimler-Benz model. The Henschel and Porsche submissions went on to serve as the basis for the PzKpfw. VI Tiger heavy tank. The PzKpfw. V prototype was completed in September 1942, and a limited production run of 20 tanks preceded authorisation for the first production variant, the Ausf. D, to begin in November.

The exigencies of war brought the Panther from factory to front line at an astonishing pace, and the lack of adequate testing and evaluation led to disappointing results in the initial combat deployment during the fighting in the Kursk salient in July 1943. "They burnt too easily,

the fuel and oil systems were insufficiently protected, and the crews were lost due to lack of training," reported General Heinz Guderian. These issues were largely corrected in the subsequent Ausf. A and Ausf. G production variants, and the Panther went on to win praise from its crews and earn a fearsome reputation among its adversaries.

CONTROL

The Panther tank's MAN single radius steering system was operated by levers from the driver position located forward in the hull. The driver was required to judge the distance to a turn and use a combination of appropriate gear and brake to accomplish it. The gearbox was a seven-speed AK 7-200 designed by Zahnradfabrik Friedrichshafen.

ARMAMENT

The primary weapon of the Panther was the long-barrelled high-velocity 75mm KwK 42 L/70 cannon manufactured by Rheinmetall Borsig. Its armour-piercing projectile weighed 7.2kg (16lb) and was specifically designed for the muzzle velocity and pressure of the KwK 42 L/70.

"THE PANTHER WENT ON TO WIN PRAISE FROM ITS CREWS AND EARN A FEARSOME REPUTATION AMONG ITS ADVERSARIES"

TURRET

The Panther turret had already been developed when the tank itself was in the design phase, and numerous alterations were introduced. Its sloped armour offered increased protection against incoming projectiles.

ARMOUR

The armour protection on the top of the Panther tank's three-man turret was 15mm (0.59 inches) thick, the thinnest in its design. Like other armoured vehicles of its era, the Panther was vulnerable to attack from Allied fighter-bombers.

WHEELS

A double torsion bar suspension supported the Panther's system of eight steel interleaved road wheels that were rimmed with rubber. The configuration made changing interior road wheels a time-consuming operation, particularly under battlefield conditions.

**PZKPFW. V PANTHER
MEDIUM TANK**

COMMISSIONED: 1942 **ORIGIN:** GERMANY
LENGTH: 8.86M (28FT 5IN) **RANGE:** 200KM (124MI)
ENGINE: V-12 MAYBACH HL 230 P30 GASOLINE
PRIMARY WEAPON: 75MM KWK 42 L/70 LONG-BARRELED CANNON **SECONDARY ARMAMENT:**
2X 7.92MM MG-34 MACHINE GUNS **CREW:** 5

"CAPABLE OF PENETRATING UP TO 150MM OF ARMOUR AT A RANGE OF 1,000 METRES, THE KWK 42 L/70 WAS SUPERIOR TO THE MAIN WEAPONS OF MOST ALLIED TANKS"

The formidable PzKpfw. V Panther tank was rushed through design and into production following the German encounters with the Soviet T-34 on the Eastern Front

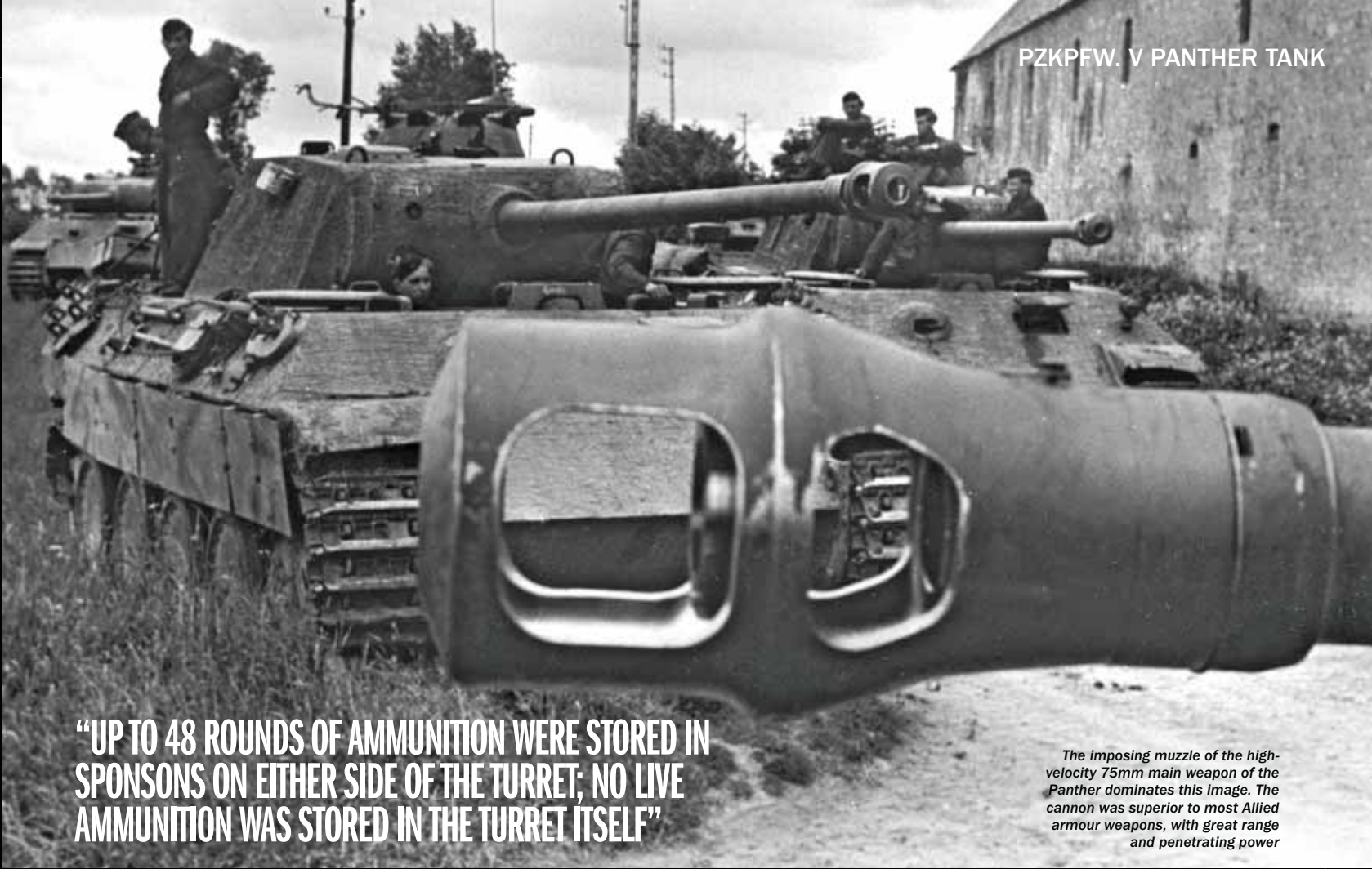


DESIGN

The design of the Panther borrowed heavily from the rival T-34. Armour sloped at 55 degrees provided enhanced defence against incoming projectiles, while wider tracks gave better cross-country performance. The suspension included double torsion bars and interwoven road wheels for stability and greater ability to traverse difficult terrain. The Ausf. D included frontal armour protection up to 80mm (3.15 inches) thick, while side armour varied in thickness from 40-50mm (1.57-1.98 inches). Weighing nearly 45 tons, it exceeded initial design specifications significantly and approached the anticipated weight of the Tiger tank, although the Panther was much cheaper to produce.

Left: German troops climb aboard a Panther for a ride. Note the exhaust pipe protruding from the rear





“UP TO 48 ROUNDS OF AMMUNITION WERE STORED IN SPONSONS ON EITHER SIDE OF THE TURRET; NO LIVE AMMUNITION WAS STORED IN THE TURRET ITSELF”

The imposing muzzle of the high-velocity 75mm main weapon of the Panther dominates this image. The cannon was superior to most Allied armour weapons, with great range and penetrating power



Painted in camouflage, this Panther exhibits some of the characteristics that made the PzKpfw. V one of the most outstanding tanks of World War II, including its wide tracks for better cross-country performance and sloped armour

ARMAMENT

The main weapon of the PzKpfw. V Panther was the 75mm high-velocity KwK 42 L/70 cannon made by Rheinmetall-Borsig. Capable of penetrating up to 150mm (5.9 inches) of armour at a range of 1,000 metres (1,094 yards), the KwK 42 L/70 was superior to the main weapons of most Allied tanks. Up to 48 rounds of ammunition were stored in sponsons on either side of the turret; no live ammunition was stored in the turret itself. The breech operated semi-automatically, ejecting spent shell casings. The L/70 was fired with electrical current rather than a firing pin. A pair of 7.92mm MG-34 machine guns protected against infantry.



The Panther incorporated numerous innovations that were adapted from the Soviet T-34

ENGINE

The primary engine of the production Panther, the V-12 Maybach HL 230 P30 gasoline engine, generated 690 horsepower, or 514.5 kilowatts of power, with a top speed of 46 kilometres per hour (29 miles per hour). The HL 230 also powered the Panther tank destroyer variants and the heavy Tiger tank models. The HL 230 was an upgraded version of the smaller original HL 210 gasoline powerplant, yielding enhanced performance and generally eliminating problems with overheating, bearing burnout, and connecting rods that had plagued the early-production Panthers. The HL 230 remained in high demand throughout World War II, and approximately 9,000 were manufactured in total.



A V-12 Maybach HL 230 P30 petrol engine generating 690 horsepower with a top speed of 46kph (29mph)



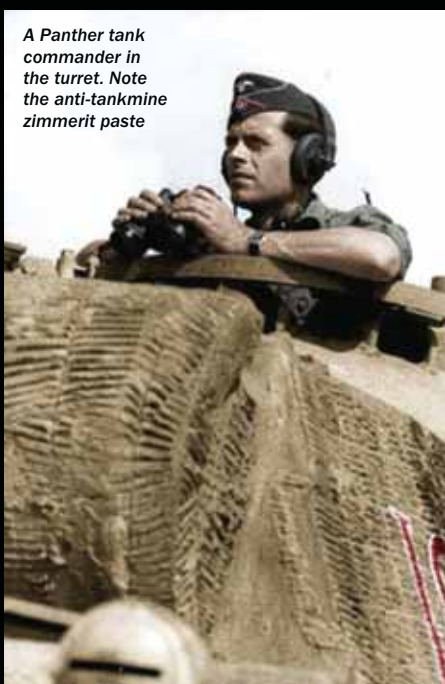
The five-man crew of a Panther tank prepares its vehicle for action against the backdrop of a winter landscape

CREW

The PzKpfw. V Panther was operated by a crew of five, including a commander, radio operator, gunner, loader and driver. The driver sat forward and to the left, steering the vehicle with a pair of hydraulic levers beside his legs. The radio operator also manned the machine gun. An existing three-man turret design with a rotating basket floor was used. Several modifications were introduced, including a cast commander's cupola and a bracket for an MG-34 machine gun in later models. The crew compartment was spacious, and escape hatches were provided for a quick exit in the event that the vehicle was badly damaged in combat.

"ESCAPE HATCHES WERE PROVIDED FOR A QUICK EXIT IN THE EVENT THAT THE VEHICLE WAS DAMAGED"

A Panther tank commander in the turret. Note the anti-tankmine zimmerit paste



A Panther tank commander emerges from the turret to survey the countryside



A German tanker slakes his thirst during a pause in the fighting on the Eastern Front



A German machine gunner, camouflaged in his position somewhere on the Russian steppes, watches for enemy tank-killer squads that might threaten the Panther looming in the background



**"BARKMANN MADE GOOD HIS
ESCAPE AFTER DESTROYING
NINE SHERMANS AND SEVERAL
OTHER SUPPORT VEHICLES IN A
MATTER OF MINUTES"**

SERVICE HISTORY

AFTER EARLY BATTLEFIELD ISSUES DUE TO RAPID DEVELOPMENT AND DEPLOYMENT, THE PZKPFW. V PANTHER MEDIUM TANK BECAME A FORMIDABLE ADVERSARY

About 250 Ausf. D Panthers entered service in January 1943 and took part in the epic Battle of Kursk that summer. Many of these were lost to mechanical breakdown. Larger engines, redesigned armour skirts and a re-engineered turret were added in a production run that ended in September 1943. A total of approximately 850 Ausf. D Panthers were manufactured before giving way to the improved Ausf. A, and about 2,200 of these were built with maximum armour protection upgraded to 120mm (4.72-inch) thickness. The most numerous Panther variant, the Ausf. G, entered production in the spring of 1944, and nearly 3,000 were completed by 1945, incorporating an upgraded exhaust system, a rotating periscope to improve the driver's field of vision, and tapered armour on the upper hull.

Once its mechanical difficulties were sorted out, the Panther became a fearsome battlefield presence on both the Eastern and Western fronts, as evidenced at the French village of Le

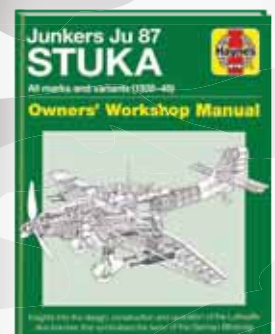
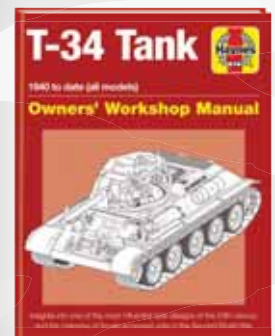
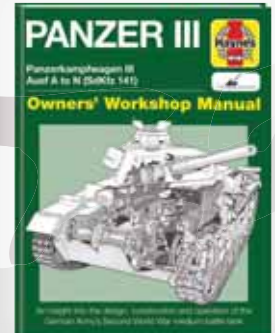
Lorey in late July 1944, when Oberscharführer (technical sergeant) Ernst Barkmann, the most prolific Panther ace of World War II, waited in ambush as an American armoured column slowly approached.

As the 15 American M4 Sherman medium tanks and support vehicles came into view, Barkmann coolly waited for just the right moment and opened fire with his devastating 75mm cannon. Swiftly, he destroyed the first two Shermans in the column and then blasted a fuel truck towards the rear. Barkmann pounced on the remaining Shermans as they attempted to move past the burning vehicles, shooting up two more. As the Americans regrouped, they called for tactical air support, and a swooping fighter-bomber damaged the lone Panther. However, Barkmann made good his escape after destroying nine Shermans and several other support vehicles in a matter of minutes. For his incredible exploits, Barkmann received the Knight's Cross.

Images: Alamy, Mary Evans, Getty, Alex Pang



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INFORMATION**



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THE THIRD REICH IN PHOTOS WARHORSES OF KURSK

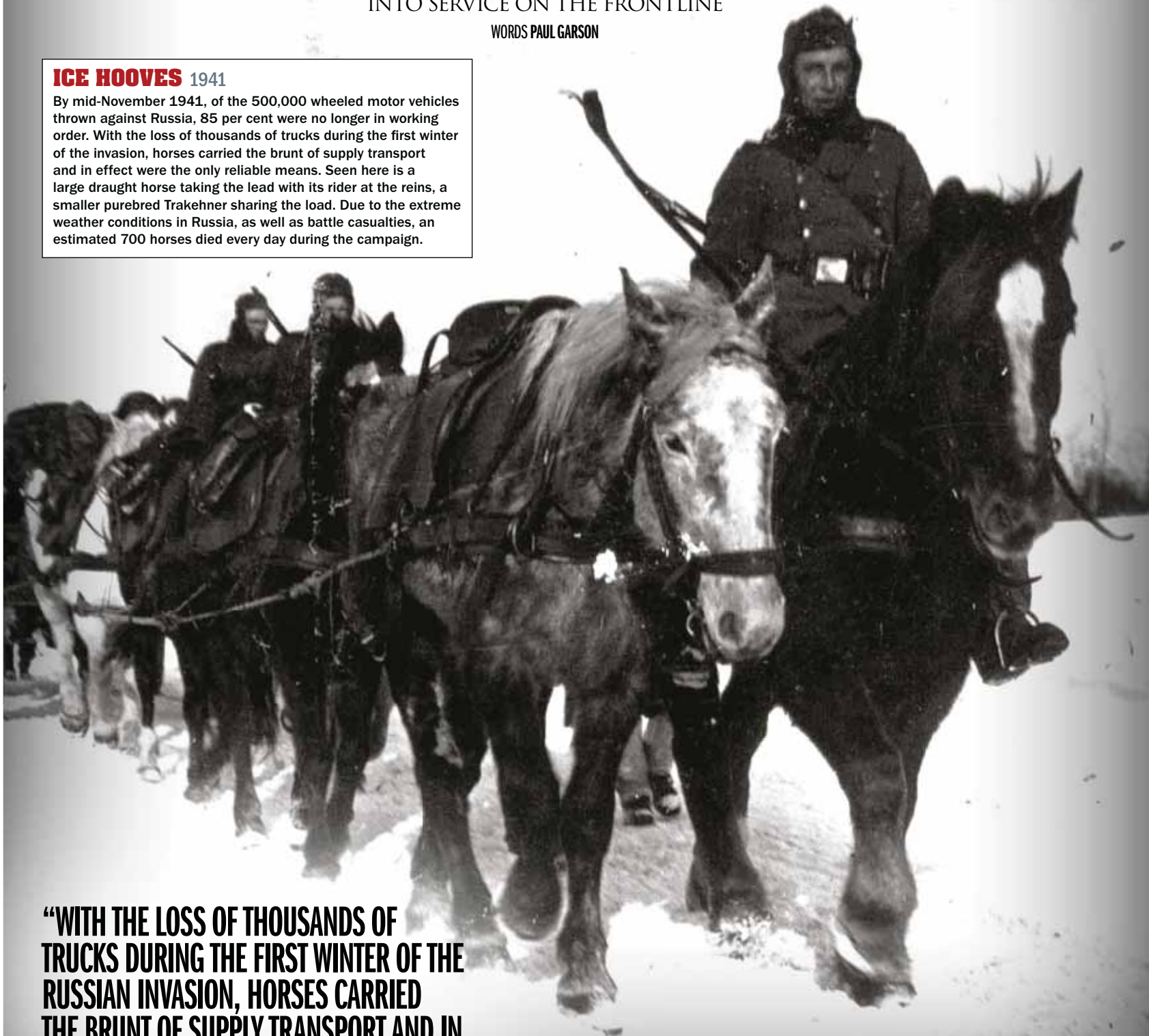


THE CAMPAIGN SAW THOUSANDS OF HORSES AND MULES PRESSED
INTO SERVICE ON THE FRONTLINE

WORDS PAUL GARSON

ICE HOOVES 1941

By mid-November 1941, of the 500,000 wheeled motor vehicles thrown against Russia, 85 per cent were no longer in working order. With the loss of thousands of trucks during the first winter of the invasion, horses carried the brunt of supply transport and in effect were the only reliable means. Seen here is a large draught horse taking the lead with its rider at the reins, a smaller purebred Trakehner sharing the load. Due to the extreme weather conditions in Russia, as well as battle casualties, an estimated 700 horses died every day during the campaign.



**“WITH THE LOSS OF THOUSANDS OF
TRUCKS DURING THE FIRST WINTER OF THE
RUSSIAN INVASION, HORSES CARRIED
THE BRUNT OF SUPPLY TRANSPORT AND IN
EFFECT WERE THE ONLY RELIABLE MEANS”**

Following World War I, the size and equipment of the German military was restricted by the Treaty of Versailles. While motor vehicles intended for the military came under strict control, the treaty allowed for seven infantry divisions and three cavalry divisions consisting of 18 regiments. In effect, the cavalry made up a large part of the German army, with 16,400 of the permitted 100,000 soldiers on horseback.

A great amount of time was afforded to basic rider training – some 3,000 hours. This laid an excellent groundwork for the horse-mounted troops, although as Germany moved towards war, the training time was reduced to an average of one hour per day, riders now focusing on weapons and combat tactics.

Since much of their duties were aimed at reconnaissance, scouting and even assault operations, the horse troopers often endured training regimens requiring 48-97 kilometres (30-60 miles) per day in the saddle, while each horse was tasked with carrying, often at speed, upwards of 115 kilograms (254 pounds) of man and equipment.

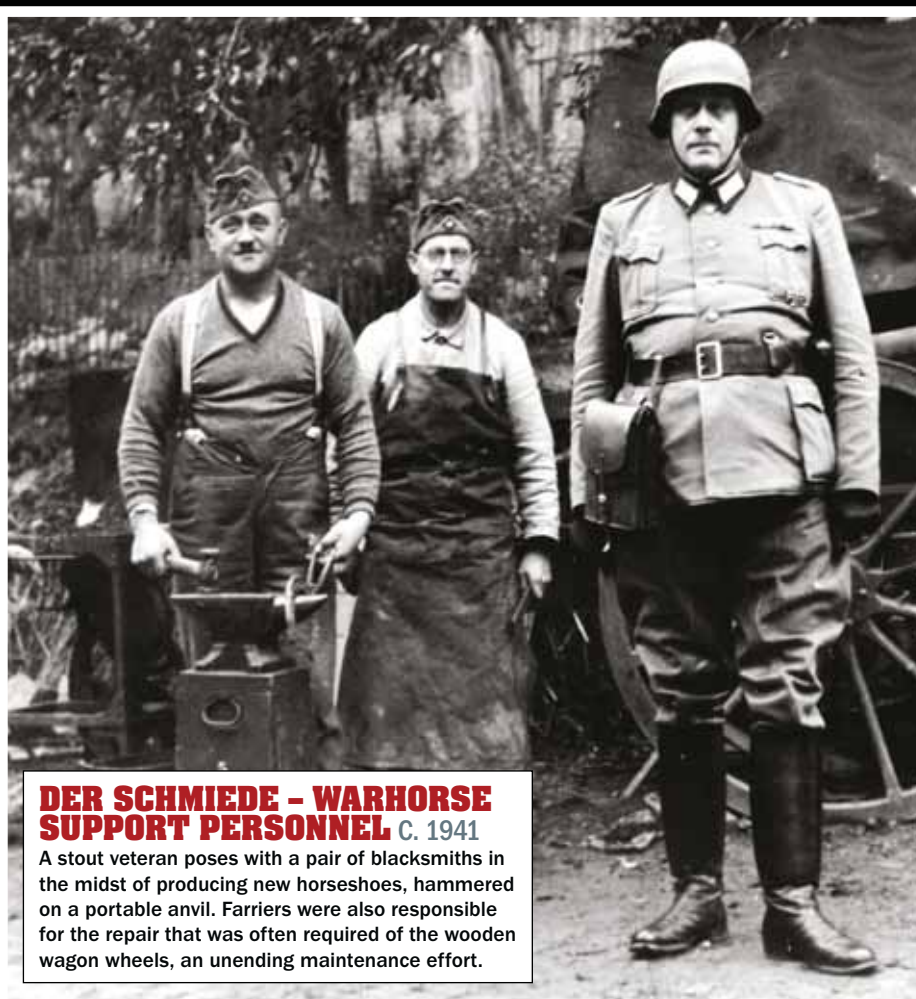
All horse riders and team drivers also took training in mastering the basic medical needs of their mounts. The extensive support system also required that a plentiful supply of both blacksmiths and veterinarians were recruited and made available for the military, facilitated by rural Germany's horse-dominated agriculture.

Examining the record of World War I and preparing for the next conflict, Germany began buying up large quantities of mounts, including many from Britain, where its military planners saw no need for horses as they were certain the next battles would be fought by modern machines, principally aircraft and the tank, thus in great part scrapping its cavalry components.

Because production of steel and iron could not keep pace with the expansion of the mechanised military, horses filled the gap. When war began with the invasion of Poland on 1 September 1939, Germany counted over 2 million men in uniform, but only 14 divisions were fully motorised, comprised of some 183,000 motor vehicles and 94,000 motorcycles, all backed up by 3.8 million horses, of which 885,000 were initially draught and pack animals.

Supplying food for the hundreds of thousands of horses employed by the German military was a daunting task, and eventually the quality and quantity fell dangerously below minimal standards. Huge quantities of fodder had to be shipped by rail, competing with the critical delivery needs of war resources. Foraging off the land was often the end result, the horses suffering as a result. Due to the stresses caused by combat and extreme weather conditions, especially in Russia, shortages of all types afflicted the warhorses, and sometimes tree bark was added to their fodder to bulk it up.

During the war, 70 per cent of all transport and supply was horse-drawn. Due to their size and the fact they were often tethered to heavy transport wagons and field artillery, horses were left to face the brunt of air attacks while their human counterparts sought cover. When rendered unfit by the rigours of traversing huge distances, the harsh climate, wounds, disease and food deprivation, horses were slaughtered on the spot and fed to their human taskmasters.



DER SCHMIEDE - WARHORSE SUPPORT PERSONNEL C. 1941

A stout veteran poses with a pair of blacksmiths in the midst of producing new horseshoes, hammered on a portable anvil. Farriers were also responsible for the repair that was often required of the wooden wagon wheels, an unending maintenance effort.



KICKING UP ITS HEELS C. 1939

A soldier's camera captures a colt in high spirits, prancing near the stables of a large horse farm. As the military expanded on all levels, the number of horses increased as well. Cavalry mounts were chosen by special committees that purchased horses at the age of three, with training beginning at four and continuing for two more years. It was a program unsurpassed by any other nation.

PANJE DIVISIONS REPLACE PANZER DIVISIONS 1942

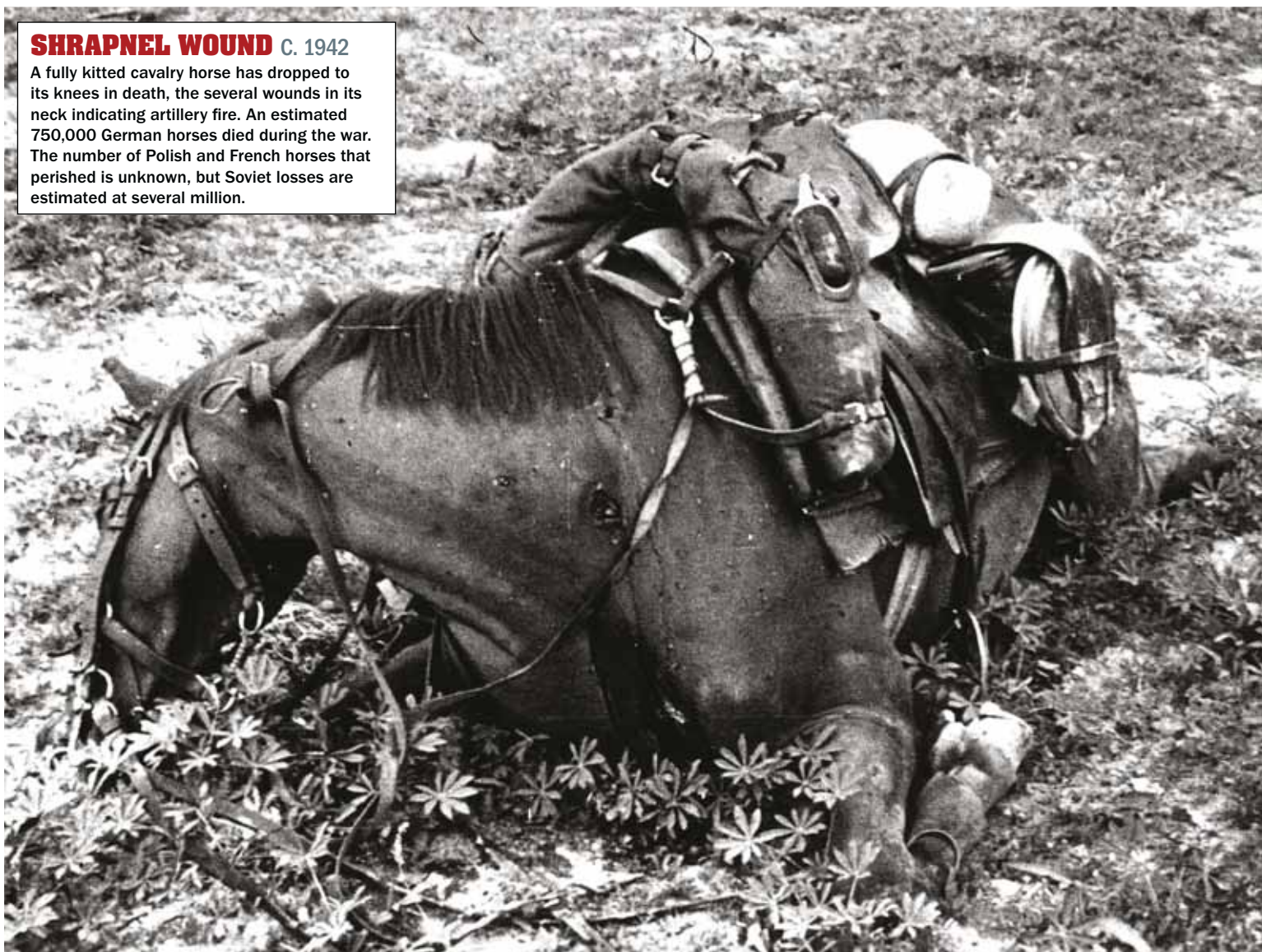
Somewhere in the Russian vastness, two German soldiers conscripted a local horse with its distinctive wooden harness. The smaller Russian panje or Bashkir breed of pony was found to be an excellent substitute for the German horses when their numbers were reduced by the harsh conditions. The high attrition rate of German motorised armour and transport during early 1942 on the Eastern Front forced increased reliance on such means.

**“THE SMALLER RUSSIAN
PANJE OR BASHKIR BREED
OF PONY WAS FOUND
TO BE AN EXCELLENT
SUBSTITUTE FOR THE
GERMAN HORSES”**



SHRAPNEL WOUND C. 1942

A fully kitted cavalry horse has dropped to its knees in death, the several wounds in its neck indicating artillery fire. An estimated 750,000 German horses died during the war. The number of Polish and French horses that perished is unknown, but Soviet losses are estimated at several million.



"THE NUMBER OF POLISH AND FRENCH HORSES THAT PERISHED IS UNKNOWN, BUT SOVIET LOSSES ARE ESTIMATED AT SEVERAL MILLION"

EQUINE EXCELLENCE

C. 1941

Some of the finest breeds were recruited, including the German warmblood Hanoverian and Trakehner, seen here, as well as the Romanian Furioso. Of all Axis allies, the Romanians supplied the largest contingent of cavalry forces.

MACHINE GUNNER ON HORSEBACK

C. 1943

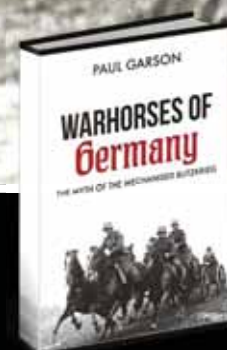
Somewhere on the Eastern Front, a cavalry trooper shoulders an MG42 machine gun, his saddle carrying a boxed field telephone, a mess tin strapped to his messenger satchel. In the background, summer wild flowers stretch into the distance. Summer would be the season for the Battle of Kursk.





FINAL FATE C. 1943

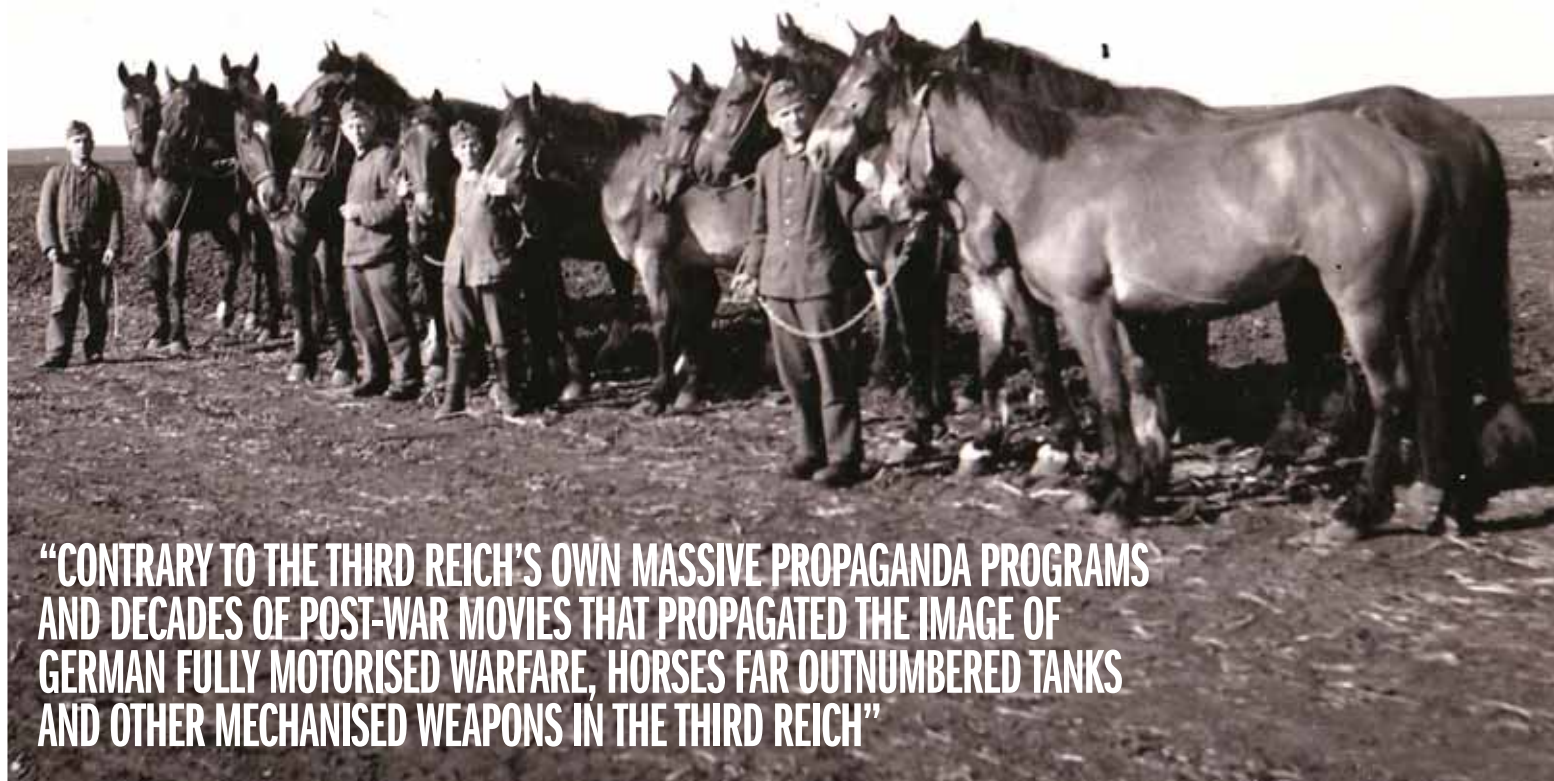
On 19 January 1943, Field marshal Friedrich von Paulus, the commander of the doomed Sixth Army surrounded by Soviet forces at Stalingrad, sent the message, "The last horses have been eaten up." While many of the army's horses had been previously evacuated before the encirclement, some 25,000 had remained with the troops, many to face the same fate as the 250,000 Germans and their Italian and Romanian allies left dead in the snow.



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GERMANY: THE
MYTH OF THE
MECHANISED
BLITZKRIEG BY
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ARRIVING AT KURSK PRIOR TO BATTLE 1943

Four soldiers pause for photos with their four-legged comrades somewhere on the empty plain at Kursk. The horses appear in good condition and well-fed.



“CONTRARY TO THE THIRD REICH’S OWN MASSIVE PROPAGANDA PROGRAMS AND DECADES OF POST-WAR MOVIES THAT PROPAGATED THE IMAGE OF GERMAN FULLY MOTORISED WARFARE, HORSES FAR OUTNUMBERED TANKS AND OTHER MECHANISED WEAPONS IN THE THIRD REICH”

HOOVED VS. TRACKED C. 1943

Two cavalry mounts are dwarfed by the formidable Tiger tank. Contrary to the Third Reich's own massive propaganda programs and decades of post-war movies that propagated the image of German fully motorised warfare, horses far outnumbered tanks and other mechanised weapons in the Third Reich. By October 1941 the German army had some 24,000 veterinary troops deployed in the Soviet Union, an indication of the vast number of horses employed on the Eastern Front.



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TIGER I TANK

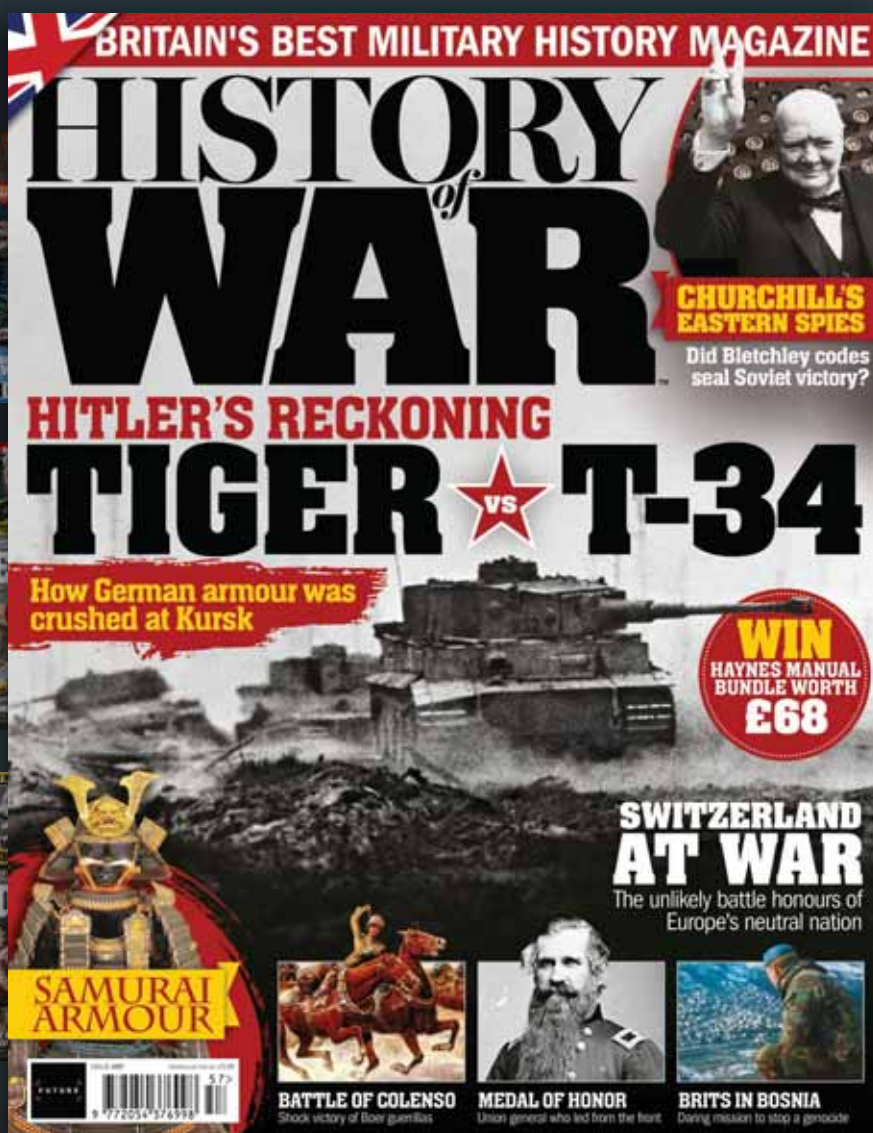
This German tank was the most powerful in the world when it was introduced in August 1942. The 88mm gun was extremely effective and the heavy armour made it almost impervious to attack. The success of the Tiger was so profound that few allied tanks dared engage it in open combat.

Assembled size: 2.85" x 1.76" x 1.17"

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BATTLE OF COLENSO

British troops marching to relieve Ladysmith walked into a deadly trap, set by Boer forces on the Tugela River at the village of Colenso

COLENSO, NATAL, SOUTH AFRICA 15 DECEMBER 1899



WORDS ALEX ZAKRZEWSKI

OPPOSING FORCES



BRITISH COMMANDERS

- ★ General Sir Redvers Buller
- ★ Major General Henry J.T. Hildyard
- ★ Major General Fitzroy Hart
- ★ Major General Neville Lyttelton
- ★ Major General Geoffrey Barton
- ★ Colonel Charles Long
- ★ Colonel Lord Douglas Dundonald

INFANTRY

- ★ 4 Brigades

CAVALRY

- ★ 1 Brigade

ARTILLERY

- ★ 44 various sized pieces

CASUALTIES

- ★ 1,127

VS



BOER COMMANDER

- ★ General Louis Botha

INFANTRY

- ★ 4,500

ARTILLERY

- ★ 12 various sized pieces

CASUALTIES

- ★ 40



In October 1899 war erupted between the British Empire and the Boer republics of the Transvaal and Orange Free State. At first glance the two sides seemed laughably mismatched, and there were few in Britain who doubted another swift and victorious colonial campaign. However, in the first few weeks of the war, the hardy, highly mobile Boers shocked everyone by invading the Cape Colony and Natal, and trapping the majority of British troops in South Africa in the frontier towns of Mafeking, Kimberley and Ladysmith. In Ladysmith alone, 13,000 British troops under Sir George White were besieged and soon rapidly running out of food and supplies.

Enter Redvers Buller

The only encouraging news for the British was that en route to South Africa was an army corps of 47,000 men – the largest force to leave the British Isles since the Crimean War – under the command of Sir Redvers Buller, a celebrated hero of numerous colonial campaigns. Barrel-chested and bewhiskered, with a ruddy, avuncular face and commanding bearing, Buller appeared to be the epitome of the Victorian

officer. During the Zulu War of 1879, he had won the Victoria Cross and lasting fame as a swashbuckling officer who rode into battle with a weapon in each hand and the reins between his teeth. Before leaving for South Africa, he had personally assured the aging Queen Victoria that the war would soon be over.

But beneath his confident demeanour, Buller had deep misgivings about his own abilities and the coming campaign. It had been years since he had last seen active service, and even then it had never been as a commander-in-chief. By his own admission, he was best-suited to following orders rather than crafting strategy, and at 59 years of age, he lacked both the energy and desire to learn. His performance during the 1895 army manoeuvres had been so bad that he was reportedly heard grumbling, “It appears I have been making a fool of myself all day.” Coming events would prove his apprehensions correct.

Buller's confidence was further shaken when he arrived in Cape Town on 31 October to find himself under tremendous pressure from the British Army, government and people to relieve the besieged garrisons as soon as possible. He had originally planned to lead his

corps in a straightforward invasion of the Boer republics, take their capitals and bring the war to a speedy end. Buller was now compelled to abruptly change those plans entirely and instead divide his force into three unequal columns, each with a different objective in a different part of the country.

In the west, Lord Methuen was given 12,000 men and tasked with breaking the siege of the diamond-mining town Kimberley, where world-famous diamond magnate Cecil Rhodes was among the besieged. In the south, Lieutenant-General William Gatacre was ordered to drive north into the Cape Midlands with his brigade and pacify the area of marauding Boer commandos. Meanwhile, in Natal, Buller himself would lead the bulk of the British forces in a relief of Ladysmith.

Beginning of 'Black Week'

Buller's plan was not a bad one, it just failed to take into account the deficiencies of his forces. Most of his troops were raw reservists, untested in combat and unused to the rigours of colonial campaigning. He also badly lacked trained staff officers and had virtually no intelligence service through which

Volunteers desperately try to retrieve the abandoned guns in the face of withering Boer fire

“DURING THE ZULU WAR OF 1879, HE HAD WON THE VICTORIA CROSS AND LASTING FAME AS A SWASHBUCKLING OFFICER WHO RODE INTO BATTLE WITH A WEAPON IN EACH HAND AND THE REINS BETWEEN HIS TEETH”

Right: General Sir Redvers Buller, a decorated hero of numerous colonial campaigns, was badly outmatched by the ingenious Louis Botha

Far right: General Arthur Fitzroy Hart mistakenly led his 'Irish' Brigade into a long and narrow river loop, where his men were swept by murderous Boer fire

GREAT BATTLES

Long's artillerymen suffered heavy casualties under Boer fire, and finally expended all their ammunition before falling back and leaving their guns



"MOST OF THE CASUALTIES WERE SUFFERED BY THE VAUNTED HIGHLAND BRIGADE, WHICH SPENT MUCH OF THE BATTLE LYING FACE DOWN UNDER THE BLAZING SUN WHILE A MURDEROUS BOER FIRE WHIZZED OVERHEAD"

information on the enemy could be gathered and interpreted. Even basic maps were in short supply, and local guides often proved unreliable or were simply ignored by haughty officers. Worse yet, because the British depended on the railways for supplies and communication, the Boers were able to predict their movements and adjust their plans accordingly.

These shortcomings quickly became embarrassingly apparent. On 10 December Gatacre's brigade got lost during a gruelling night march and blundered into a Boer force near the railway junction of Stormberg. In the ensuing confusion, 600 men were taken prisoner. The next day, Methuen lost almost 1,000 men, including a general officer, while assaulting concealed Boer trenches at Magersfontein. Most of the casualties were suffered by the vaunted Highland Brigade, which spent much of the battle lying face-down under the blazing sun while a murderous Boer fire whizzed overhead.

These defeats were the first in what the British press would eventually dub 'Black Week' and they put further pressure on Buller to at the very least relieve Ladysmith as soon as possible. But it was a task easier said than done. To reach Ladysmith, he had to cross the Tugela River, a snaking 500-kilometre (310-mile) waterway that flows from the Drakensberg mountains in the west to the Indian Ocean in the east. The easiest place to cross was at the village of Colenso, less than 24 kilometres (15 miles) south of Ladysmith and 20 kilometres (12 miles) north of his basecamp in Natal.

Because Colenso was the most obvious place to cross, Buller knew it would be heavily defended, and he originally planned instead to cross much further upstream, where he could get across unimpeded and then flank the defenders at Colenso. However, upon hearing

of the defeats at Stormberg and Magersfontein he once again hastily scrapped his plans and committed his forces to a crossing at Colenso, where he knew the Boers were waiting.

Enter Louis Botha

Colenso was little more than a collection of corrugated iron huts and a railway stop on the south bank of the Tugela. It was situated in one of the river's many loops and was bound by water on three sides. Overlooking the village was a series of small, rocky hills, or 'kopjes', one of which was fortified and called 'Fort Wylie'. Colenso offered four crossing points: two fords, a wagon bridge and a railway bridge. Four kilometres (2.5 miles) to the west, near where the river flowed in another large, northward-pointing loop, was another ford called the 'Bridle Drift' that Buller's forces could also use to cross. Unfortunately, the exact location of this other drift was somewhat hazy and the resulting confusion would have lethal consequences in the coming battle.

The Boer defenders at Colenso were led by Louis Botha, a 37-year-old farmer and politician-turned-general. He commanded roughly 4,500 men, the majority local militia who fought in civilian clothes and elected their own officers. As a frontier people, the Boers were used to the harsh conditions of the South African veldt,

“GATACRE’S BRIGADE GOT LOST DURING A GRUELLING NIGHT MARCH AND BLUNDERED INTO A BOER FORCE NEAR THE RAILWAY JUNCTION OF STORMBERG”

and from a young age Boer boys were taught how to shoot, ride and survive in the wild. Centuries of conflict with neighbouring African tribes had also taught them the importance of mobility and concealment. Most were armed with the model 1895 German Mauser rifle, which fired a five-round clip of smokeless powder cartridges and had a higher velocity and better accuracy than the Lee-Enfields and Lee-Enfields carried by the British troops.

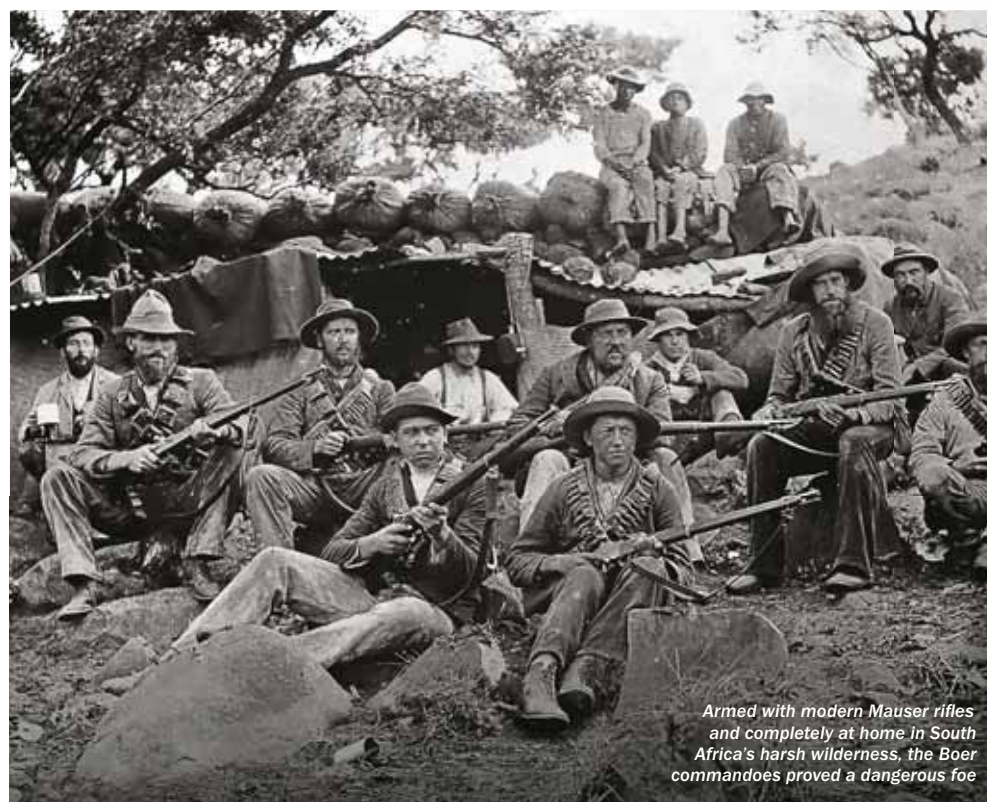
Botha's plan was to funnel the attackers towards the crossing in Colenso, where they would be swept with fire from three sides. Rather than occupying the high ground, which he knew the British artillery would instinctively target, Botha cleverly placed the bulk of his forces in camouflaged trenches along the river in a long broken line extending from Colenso to the Bridle Drift. He also had at his disposal 12 artillery pieces, including a five-inch Krupp Howitzer, most of which he distributed on the hills overlooking the northward-pointing loop in the river west of the village. The crews of these guns were well-trained professionals and among the few Boer troops to receive uniforms.

The only gap in Botha's defensive scheme was east of Colenso, where the river suddenly turns north. On the eastern bank is a low mountain called Hlangwane Hill. Botha knew that if the British seized Hlangwane, they could enfilade the Boer trenches from almost one end to the other and possibly roll up his left flank. But because the mountain was cut off from the main Boer forces by the river, he had great difficulty convincing his men to garrison it, and at the time of the battle only a skeleton force of a few hundred men had taken position there.

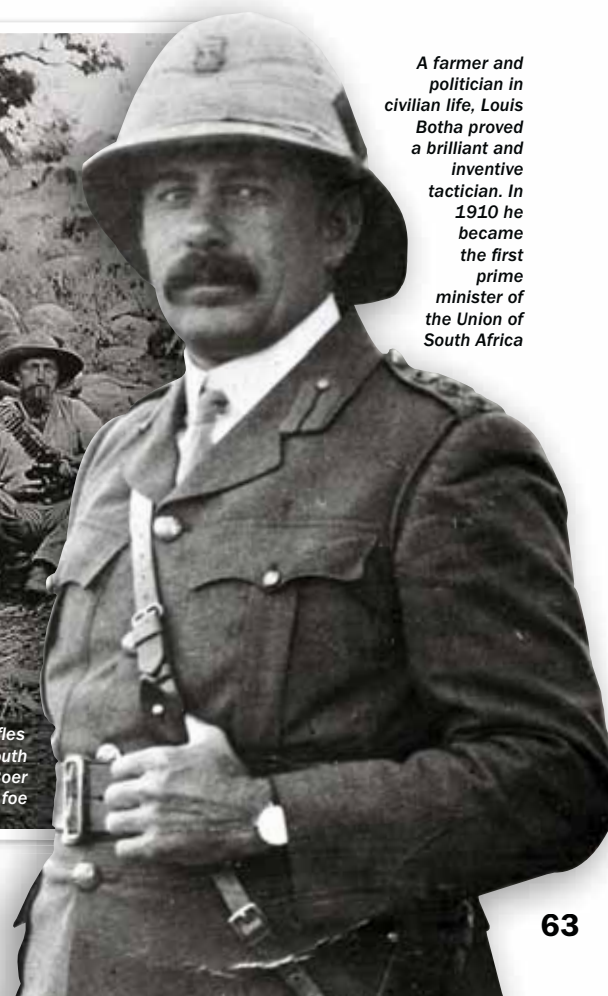
Battle is joined

Buller's heavy naval guns began shelling the Colenso kopjes on 12 December to “soften up”

A farmer and politician in civilian life, Louis Botha proved a brilliant and inventive tactician. In 1910 he became the first prime minister of the Union of South Africa



Armed with modern Mauser rifles and completely at home in South Africa's harsh wilderness, the Boer commandoes proved a dangerous foe



the Boer positions in anticipation of the coming crossing. Unfortunately, the British made no further effort to properly reconnoitre the area and ascertain exactly where the Boers were. Had they done so, they would have noticed that the lyddite shells were exploding harmlessly over unoccupied ground. On the evening of 14 December, still without any indication as to what exactly his troops would face, Buller gave his brigade commanders their orders.

Buller's force boasted about 16,000 men and 44 artillery pieces, which he once again divided into three for a multi-pronged assault over a front of roughly 11 kilometres (6.8 miles). The plan called for Major General Henry J.T. Hildyard's 2nd 'English' Brigade to seize Colenso and its crossings with supporting fire from two batteries of field pieces and six naval guns, under the command of Colonel Charles Long. At the same time, west of Colenso, Major General Fitzroy Hart's 'Irish' Brigade was ordered to cross at the Bridle Drift and advance downstream to roll up the Boer line. On the extreme right, Lord Dundonald's Cavalry Brigade would engage the Boer defenders on Hlangwane, although, for some reason, he was expressly ordered not to take the crucial position. Both Major General Neville Lyttelton's 4th Light Brigade and Major General Geoffrey Barton's 6th Fusilier Brigade were kept in reserve to support the attacks where needed.

At roughly 4.45am on the morning of 15 December 1899 the Battle of Colenso began with yet another ineffective bombardment from Buller's naval guns. From there, things almost immediately began to go wrong. On the left, Hart's brigade got lost trying to find the Bridle Drift and instead inexplicably marched straight into the large loop west of the village. What prompted Hart to lead his men into such an obviously compromising position remains a matter of conjecture to this day. Some sources say he was misled by an incompetent or treacherous guide. Others claim that Hart, who had been drilling his Irish regiments for half an hour before the attack even began, was suffering from an acute case of heatstroke.

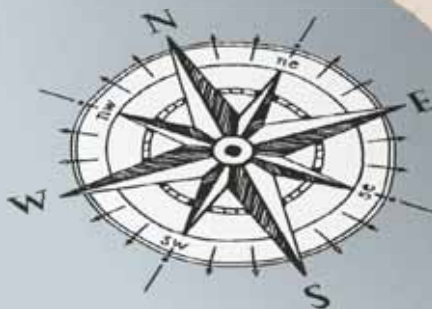
Hart was known as 'No-Bobs' because of his refusal to duck or seek cover under fire, and he insisted that his men do the same. To that end, he deployed his brigade in quarter column as if on parade. The Boer defenders watching anxiously from their camouflaged trenches could hardly believe their eyes as Hart's men marched smartly and obviously towards them. They patiently waited until the brigade was almost at the apex of the loop, then unleashed a withering fire from three sides that decimated the tightly packed ranks. From atop the Tugela heights, Botha's artillery also rained down on the Irishmen.

True to his nickname, Hart refused to take cover and instead marched up and down his lines urging his men forward. It was no use. Some 3,200 men were crammed into a space barely 900 metres (984 yards) wide, making them almost unmissable targets for both the Boer marksmen and artillery. Within minutes all cohesion was lost as men became separated from their officers and units mixed. A lucky few were able to find shelter in an abandoned 'kraal', or hut. A brave handful even managed to reach the river, where they desperately

Great Battles

BATTLE OF COLENZO

01 BOER POSITIONS Botha places the bulk of his force in a long broken line of concealed trenches along the Tugela. The Boers are excellent marksmen and almost impossible to spot in their inconspicuous civilian clothing. By eschewing the high ground, Botha not only misdirects Buller's preliminary bombardment, he makes his own troops' fire more lethal, as a bullet fired from a flat trajectory has a greater killing potential than a bullet fired downward.



BRITISH CAVALRY



BRITISH INFANTRY



BOER INFANTRY



BRITISH GUNS



BOER GUNS

03 LONG RACES AHEAD

Colonel Long is supposed to support General Hildyard's advance on the village of Colenso with both his field batteries and naval guns. Instead he rapidly speeds ahead of both his infantry support and naval guns to within 600 metres (656 yards) of the Tugela River and the Boer trenches. Long and his gunners take heavy casualties and are forced to leave 12 guns on the open plain. Long himself is badly wounded and spends most of the battle unconscious.

04 MISSED OPPORTUNITY

If Buller had seized Hlangwane Hill, his troops could dominate the Boer trenches. Botha had trouble convincing his men to occupy the position, and at the time of the battle only a small garrison is positioned there. Amazingly, Buller orders Colonel Dundonald to engage the Boer troops there with his Cavalry Brigade but not seize the hill, which he could have done with some support from Barton's brigade.

06 LYTTTELTON SAVES HART

General Lyttelton's brigade is ordered by Buller to help extract Hart's brigade from the river loop. Lyttelton deploys his brigade in an extended line across the mouth of the loop and successfully covers the withdrawal of Hart's men, but not before suffering heavy casualties.

02 HART GETS LOST

General Fitzroy Hart is supposed to lead his 'Irish' Brigade across the Bridle Drift four kilometres (2.5 miles) west of Colenso then advance upstream towards the village. Instead, he marches his men in quarter column straight into a long, narrow, northward-point loop in the river, where they are swept from three sides by fire from the Boer trenches. The few who manage to make it to the water find their way blocked by barbed wire entanglements fixed to the riverbed.

05 HILDYARD MAKES PROGRESS

General Hildyard's brigade and his men make good progress advancing in open order on Colenso, where they return fire on the Boer trenches and seize the crossings. They are in a good position to help retrieve Long's guns under the cover of darkness, but Buller orders them to withdraw without bringing on a fight.

07 COSTLY RESCUE ATTEMPTS

Repeated attempts are made to save Long's stranded guns, but only two are successfully retrieved, at heavy cost. Among the dead is Lieutenant 'Freddy' Roberts, son of Lord Frederick Roberts, Britain's most famous living soldier. Lieutenant Roberts is later posthumously awarded a Victoria Cross for his sacrifice. After the battle, the victorious Boers ship the captured guns to Pretoria to be put on display as war trophies.

08 BULLER GIVES UP

After witnessing the costly failures to retrieve Long's guns, Buller loses his nerve and orders his troops to retire from the field and begin the long, hot march back to their basecamp. He is fortunate that Botha makes no effort to harass the withdrawal. Instead the Boers wait until late afternoon before creeping from their trenches to seize the guns and take isolated pockets of British troops as prisoners.

searched for a crossing. What they found instead was that the Boers had anchored barbed wire entanglements to the riverbeds, making them impassable.

In the centre, events unfolded just as disastrously. Colonel Long was a fire-breathing officer who believed that the “only way to smash those beggars is to rush in at ‘em”. When he received the order to advance, he overzealously led his two batteries of field pieces to within 600 metres (656 yards) of the Tugela, making no effort whatsoever to wait for either infantry support or his naval guns to catch up. Alone on the open plain, his gun crews were immediately swept by a devastating fire from the Boer trenches. Long himself was wounded in the arms, liver and kidney and had to be dragged back to the shelter of a dried-out river bed, or ‘donga’, about 300 metres (328 yards) behind his guns.

His surviving gun crews continued to service their guns with incredible courage and calm, even counting out the intervals between shots as if on the training ground. They trained their fire on Fort Wylie, which was soon a cloud of red dust. But the intense fire from the Boer trenches continued to take a heavy toll. By 7.00am they had fired off 930 rounds and were nearing the end of their ammunition. With the infantry support still far behind and their horses killed, they fired off their remaining shells and joined their commander in the donga to await relief. When one gunner wondered whether the guns would have to be abandoned, a semi-conscious Long exclaimed, “Abandon be damned! We never abandon guns!” before losing consciousness altogether.

Buller watched the opening stages of the battle from atop a hill a few kilometres south of Colenso. As he peered into his binoculars between bites of his breakfast, he could see that Hart was in the wrong place. He could also see Long’s guns sitting unattended in a perfect firing line on the open veldt. “Hart has got himself into a devil of a mess,” he told General Lyttelton. “Get him out as best you can.” Buller then rode out, at great personal risk to himself, to the donga where Long and his gunners were sheltering to see what was going on.

In truth, though the opening stages of the battle had not gone as planned, all was not lost. By now, Hildyard’s brigade had occupied Colenso and was in the process of seizing the



Buller's troops were well-motivated but unprepared for a difficult campaign against an enemy as well-armed and tactically adept as the Boers

crossings. His men had even managed to spot and return fire on some of the Boer trenches. Long’s naval guns had also finally caught up and were similarly blazing away on the enemy positions. And on the right, Dundonald’s men had made good progress fighting their way up the rocky slopes of Hlangwane. With some support from Barton’s brigade, they would have been in a good position to capture the mountain entirely – a move that would have given Buller the tactical initiative.

Unfortunately Barton refused to move without orders from the commander-in-chief, and the latter was fixated on only one thing – saving Long’s guns. Buller knew that if the dozen guns were to be captured, it would be the greatest and most humiliating loss since the Napoleonic Wars, and he refused to focus on anything else until they were retrieved. After much debate as to what to do, Buller’s aide-de-camp, Captain Harry Norton Schofield, courageously offered to

Native stretcher-bearers carrying wounded from the field. Most of the British casualties were suffered by Hart’s Irish Brigade



A number of costly attempts were made to save Long’s stranded guns, but in the end only two of the 12 could be retrieved



“AS BULLER WATCHED THE FAILED RESCUE ATTEMPTS FROM THE DONGA, HIS CONFIDENCE, ALREADY HORRIBLY SHAKEN, FINALLY DESERTED HIM”

“A MORE UNSATISFACTORY AND IN SOME WAYS INEXPLICABLE ACTION IS NOT TO BE FOUND IN THE RANGE OF BRITISH MILITARY HISTORY”

– Sir Arthur Conan Doyle

lead a rescue attempt. Eight other men stepped forward to join him. Buller ordered two more members of his staff, Captain Walter Congreve and Lieutenant Frederick 'Freddy' Roberts, to assist as well. 27-year-old Lieutenant Roberts also happened to be the son of Field Marshal Lord Frederick Roberts of Kandahar, Britain's most famous living soldier and a professional rival of Buller's.

The 11 men galloped into what one later remembered as a “perfect storm of shot and shell”. For some unknown reason, perhaps worried that they too were at risk of being captured, Buller had ordered Long's naval guns to retire from the field. This had the effect of intensifying the fire from the Boer trenches just as the rescue party set out. When they were within 90 metres (98 yards) of the guns,

Congreve was wounded in three places and thrown from his horse. Shortly after, Roberts's mount suddenly reeled, and he too fell down severely wounded. The other nine men managed to limber three of the guns, but a lucky Boer shell flipped one over, disabling it. The other two were saved. Two more rescue attempts were made, but they failed with heavy losses.

As Buller watched the failed rescue attempts from the donga, his confidence, already horribly shaken, finally deserted him, and he became convinced that the battle was lost. It was later revealed that he had been further rattled by a bruised rib from a spent piece of shrapnel and the horrible sight of his personal surgeon being killed mere metres from where he was standing. At 11.00am he made the decision to leave the remaining ten guns to the enemy and call off the action. Up and down the British line, the order was given to disengage and retire from the field. Many officers responded with incredulity. Half of Buller's force had not yet even fired a shot. Some of Hildyard's men pleaded to be allowed to hold their positions and rescue the guns under the cover of darkness, but Buller steadfastly refused.

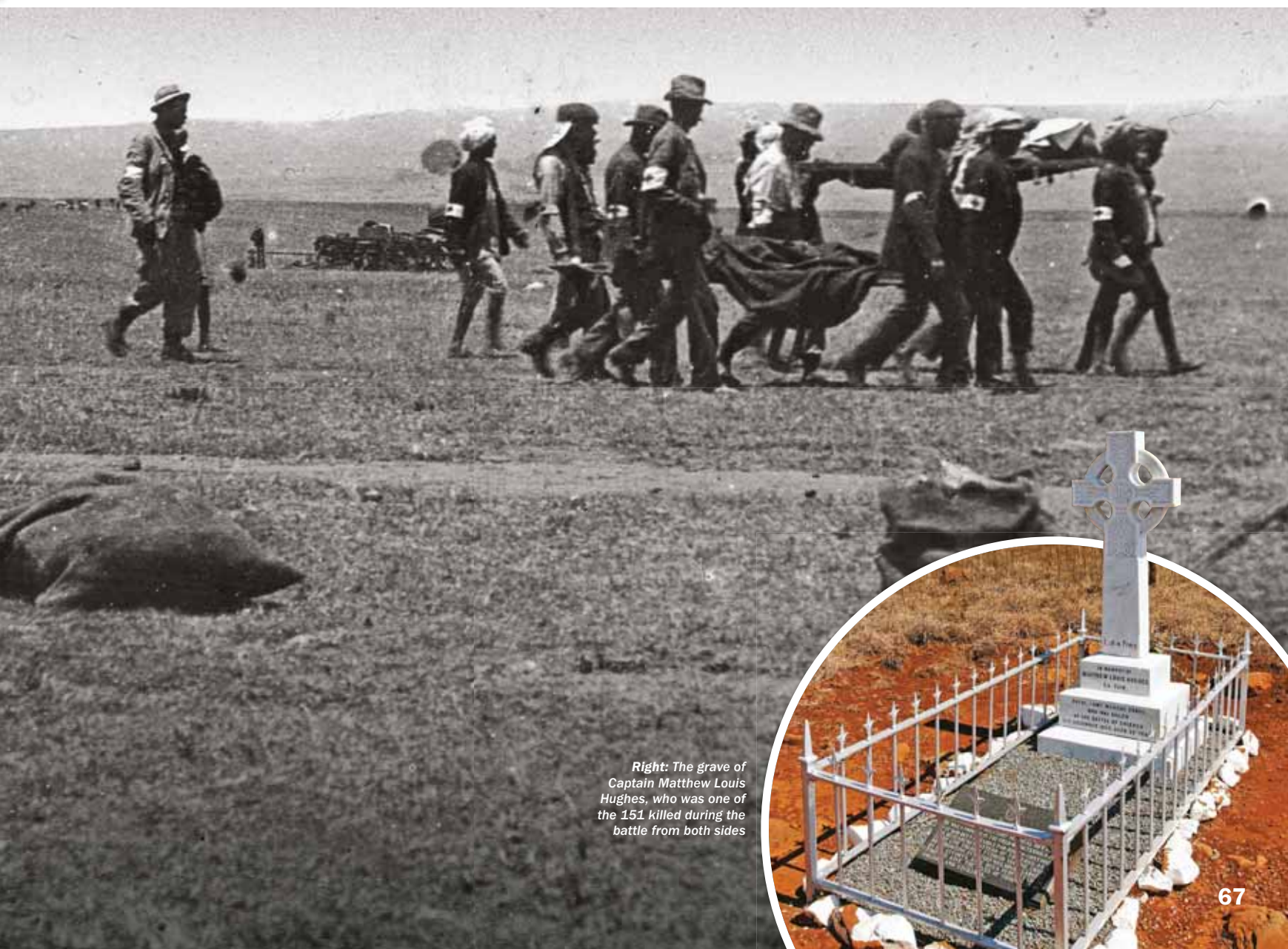
Aftermath

As the British slowly withdrew from the field, the Boers crept out from their trenches to

survey for themselves the carnage they had wrought and to claim their prizes. In another donga south of Colenso, Colonel George Bullock and 125 men who never received the order to retreat were taken prisoner. In total, Buller had suffered 1,127 casualties, including 143 killed and 240 missing. Among the casualties was the young Freddy Roberts, who succumbed to his wounds two days later. He was posthumously awarded the Victoria Cross – one of four earned during the battle. 18 Distinguished Conduct Medals were also awarded. Botha claimed to have suffered only 40 casualties, including just eight killed.

Though far from a decisive defeat, Colenso was the last and most humiliating of the three Black Week routs. Sir Arthur Conan Doyle went so far as to write that, “A more unsatisfactory and in some ways inexplicable action is not to be found in the range of British military history.” In the days that followed, a despondent Buller signalled George White in Ladysmith and suggested he fire off his remaining ammunition and surrender. White refused to capitulate, but when the message became public, Buller's reputation was irreparably damaged. The press quickly nicknamed him 'Sir Reverse' and soon after the battle he was replaced as commander-in-chief in South Africa by Lord Roberts of Kandahar.

Images: Alamy, Rocio Espin, Mary Evans, Getty



Right: The grave of Captain Matthew Louis Hughes, who was one of the 151 killed during the battle from both sides



Heroes of the Medal of Honor

JOHN CLEVELAND ROBINSON

This officer forged a reputation for being one of the most capable Union generals in the American Civil War – until he lost a leg at Spotsylvania in 1864

WORDS FRANK JASTRZEMBSKI

Charles E. Davis Jr. of the 13 Massachusetts Volunteers admitted that, at first, he and his comrades had their doubts about General John C. Robinson. “We were not always just in our estimation of division commanders,” he confessed. “We had an impression for a while that he [Robinson] didn’t like us – this was a mistake.” Robinson didn’t garner the kind of love commanders like General John F. Reynolds or General John Sedgwick did, due to his reticent personality. “He hedged himself with so much strict official dignity, that he concealed many of the good qualities he possessed,” Davis wrote. “It took a long time for us to work up the regard which was natural for us to feel for a brave and gallant officer, such as we knew him to be.” He may not have been the most personable generals in the Army of the Potomac, but he was one of the most dependable.

John Cleveland Robinson, born in 1817 in Binghamton, New York, could trace his lineage back to the Puritans and the Mayflower. His father, Dr Tracy Robinson, was a physician who had moved from Connecticut to New York and opened up a drug store in Binghamton. Instead of following his father into the medical field, John Robinson entered the United States Military Academy in 1835 at the age of 18. Within two years of his admittance, he was dismissed for disobedience. After being expelled from the most prestigious military school in the United States, he decided to study law, but John

Robinson was not cut out to be a lawyer and instead secured an appointment in the army as a second lieutenant in October 1839.

He bounced between frontier posts in Wisconsin, Missouri and Michigan until the outbreak of the US-Mexican War in 1846. He served with distinction in the battles fought in northern Mexico. General William S. Worth enthusiastically endorsed Robinson’s application for the position of assistant quartermaster after the Battle of Monterrey. “I take special pleasure in cordially recommending Lieutenant Robinson as qualified in every respect by habits, services in the field, experience in the department and gallant conduct in action, for the appointment he desires,” Worth wrote. “Indeed, I know of no young officer with higher claims or better qualifications.”

Robinson remained in the army after the Mexican War. He commanded the garrison at Fort McHenry in Baltimore on the eve of the American Civil War. A veteran with 20 years of military experience,

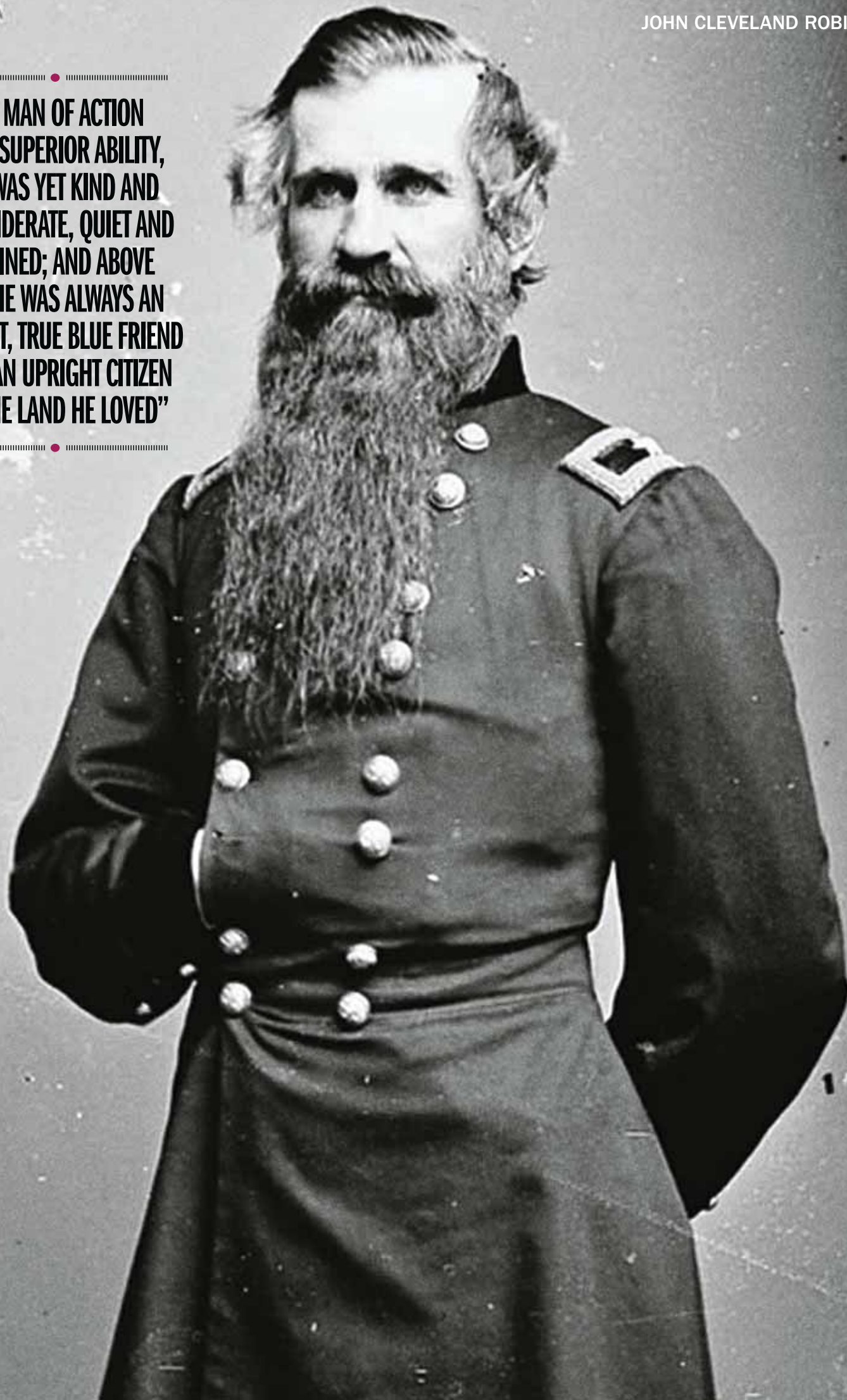
Robinson was appointed colonel of the First Michigan Volunteers in September 1861. He was quickly promoted to the rank of brigadier general in April 1862. His appointment was “earnestly” commanded by a veteran of the Mexican War, General John E. Wool, who stated that “he had one of the finest regiments in service”. Robinson was given command of the First Brigade of General Philip Kearny’s division in III Corps, composed of the five regiments from Indiana, New York and Pennsylvania.

Described as “rather fierce in appearance and manner” by Abner R. Small of the 16th Maine Volunteers, General Robinson stood out among an army packed with larger-than-life personalities. Physically imposing, he had broad shoulders and a stocky chest. He wore a worn wide-brimmed slouch hat and a massive beard that hung down to the middle of his chest, giving him the appearance of a farmer rather than a general. “General Robinson’s character was shown by his face,” one man noted, “It was finely cut. A man of action and superior ability, he was yet kind and considerate, quiet and refined; and above all he was always an honest, true blue friend and an upright citizen of the land he loved.” He forged a reputation as a “brave, upright, and



Right: The set of crutches presented to John C. Robinson by his son (Courtesy of Heritage Auctions)

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clear-headed soldier” among his men, and was regarded as one of the best officers in the Army of the Potomac.

Robinson’s First Brigade took part in General George B. McClellan’s Peninsula Campaign of 1862 to capture the Confederate capital of Richmond. Robinson distinguished himself in brigade command at the Battle of Glendale on 30 June 1862, where he held his ground against repeated Confederate attacks. The one-armed, pugnacious General Kearny – at first reluctant to have Robinson replace one of his brigade commanders – left a glowing account of Robinson in his report after the battle: “I have reserved General Robinson for the last. To him this day is due above all others in this division the honors of this battle. The attack was on his wing. Everywhere present, by personal supervision and noble example, he secured to us the honor of victory. Our loss has been severe, and when it is remembered that this occurs to mere skeletons of regiments, there is but one observation to be made – that previous military history presents no such parallel.”

“TO HIM THIS DAY IS DUE ABOVE ALL OTHERS IN THIS DIVISION”

General Kearny after the Battle of Glendale

Robinson continued to serve with the Army of the Potomac leading into 1863. He had a number of hairbreadth escapes due to his tendency to position himself where the bullets were the thickest. At the Battle of Second Manassas, Robinson was struck by a shell fragment but was not injured. Given command of a division in 1862, Robinson had a horse shot from under him while on the front line at Marye’s Heights during the Battle of Fredericksburg.

The Battle of Gettysburg was Robinson’s Waterloo. His division was part of General John F. Reynolds’s I Corps that arrived at Gettysburg to support General John Buford’s cavalry

division, holding back the vanguard of Lee’s army advancing into Pennsylvania. His division held its ground for hours in the summer of 1863. “For nearly four hours on July 1st we were hotly engaged against overwhelming numbers,” Robinson later wrote, “repulsed repeated attacks of the enemy, captured three flags and a very large number of prisoners, and were the last to leave the field.” The division of 3,000 men suffered the loss of half its strength. Their sacrifice, along with the other Union units engaged on the field that day, allowed for General George Meade to secure the high ground around Cemetery Hill, leading to the defeat of Lee’s army after two days of fighting.

Robinson had two horses shot from under him during the fighting on 1 July. His corps commander, General John F. Reynolds, was killed by a Confederate sharpshooter, while General Gabriel R. Paul, commander of Robinson’s First Brigade, was shot in the head and blinded, and three commanders succeeded to command the brigade after Paul was wounded (Colonels Leonard, Root and Coulter). Colonel

A depiction of the brutal fighting at Spotsylvania, May 1864



Charles Wheelock of 97th New York Volunteers recalled that Robinson and the commander of his Second Brigade, General Henry Baxter, “were on every part of the field, encouraging and stimulating the men by their presence and bravery”. They both made it through the battle unscathed. Robinson was later brevetted lieutenant colonel in the regular army for “gallant and meritorious services” at Gettysburg.

Robinson survived the restructuring of the Army of the Potomac in the spring of 1864 when some other veteran corps and division commands lost their commands. The Battle of Spotsylvania, part of General Ulysses S. Grant’s bloody spring Overland Campaign into Virginia, was Robinson’s last battle.

Robinson’s division led the vanguard of General Gouverneur K. Warren’s Fifth Corps flanking movement to reach Spotsylvania Court House. They took the Confederate defenders by surprise at Laurel Hill on 8 May, driving them back. Robinson then met a second line concealed along a tree line. He halted his three brigades, re-formed, and renewed the assault.

“I HAVE FOUGHT A GOOD FIGHT, I HAVE STAYED THE COURSE, I HAVE KEPT THE FAITH”

Epitaph on Robinson’s tombstone

His men made little progress. In one last effort, Robinson led an assault in the hope of inspiring his men to breach the Confederate line. “Knowing that my brave men would follow wherever I led the way,” Robinson wrote, “I placed myself at their head and led them forward to attack.” He called to his men, “This place must be ours!” and urged them forward. Riding into battle mounted made him a prime target. “Cheering my men on, we had arrived within 50 yards (46 metres) of the works when I received a musket-ball on the left knee.” The attack was repulsed after Robinson fell.

Robinson’s wound was severe and he had to be carried from the field. A fellow officer, General John Gibbon, recalled seeing Robinson lying along the road on a canvas litter with his leg shattered. “He was a real loss to the Army of the Potomac,” Charles E. Davis declared, “as he ranked very high, being considered one of the bravest as well as one of the most efficient officers in the army”. The general was transported in an ambulance to Aquia Creek with 400 wounded soldiers. He remained at the home of his brother in Washington D.C. until the lower third of his leg was amputated by Surgeon-General Joseph K. Barnes on 15 May.

For a time, it looked as if Robinson would succumb after the amputation. President Abraham Lincoln visited him on a number of occasions, wishing him a quick recovery. His health improved, and three months after his leg was amputated, Robinson notified the War Department that he was ready for light duty. His son, Lieutenant Erastus Robinson, who had served as his aide-de-camp, presented him with a pair of crutches to get around. This remained his mode of transportation for the remainder of his life.

Robinson returned to duty in September 1864 but remained in administrative roles until the end of the war. He was mustered out, but in September 1865 General Ulysses S. Grant telegraphed Secretary of War Edwin M. Stanton requesting that he revoke the order. “I think it unjust to him to Muster him out whilst others are retained,” Grant telegraphed, “it has probably been by Mistake if he was Mustered out & I would ask to have the order revoked in this case.” This incident showed Grant’s high regard for Robinson.

Robinson remained active until the end of his life, even with a disability limiting his mobility. He entered politics and was elected lieutenant governor of New York in 1872. After he retired from public life, one observer recalled witnessing him cruising in a carriage about the city on summer days, his crutches by his side. Despite his old age, it was noted that he “was as straight as a young sapling”.

Robinson was awarded the Medal of Honor on 28 March 1894 for his bravery in the charge that led to the loss of his leg in 1864. Towards the end of his life, he went totally blind, but

he still took the stage in front of Civil War veterans, some of whom he’d commanded, at a banquet held in New York City. One attendee recalled the “pathetic scene” when “General Robinson, standing with sightless eyes, bid his old companions-in-arms a last farewell,” as 600 veterans “cheered him loudly”.

Robinson died three weeks later at his home in Binghamton at the age of 79. “During the last years of his life he was physically a wreck, having lost a leg at Spotsylvania, and the loss of sight followed,” General Edward F. Jones stated during Robinson’s memorial service, “But he stood like a shattered oak, almost alone, his contemporaries having already succumbed. He at last had yielded to the inevitable.”

General John C. Robinson’s statue, Gettysburg National Military Park, Pennsylvania, United States



Images: Alamy, Heritage Auctions

GORAŽDE STILL STANDS

Colonel Richard Westley, OBE, MC on thwarting genocide in Bosnia

In the summer of 1995 a town few had heard of became shorthand for horror: Srebrenica. Subject to the same threat to exterminate its Muslim population, a similar fate could have easily befallen Goražde were it not for 300 brave British soldiers

The brutal Bosnian War had rumbled on for four years, reducing the once-cosmopolitan heart of the former Communist Yugoslavia, with its Ottoman-era mosques and lush green mountains, into fractured statelets of competing national aspirations. Bosnian Muslims (Bosniaks) desired independence, fearing a Serb-dominated rump Yugoslavia following the violent breakaway of Slovenia (1991) and Croatia (1992). Bosnia's Catholics (Croats) feared Serb dominance too, but while some allied with the Bosniak government in Sarajevo, others felt the pull of their newly emancipated 'homeland'.

Bosnian Serbs jumped at Islamist shadows and estrangement from their kin in Belgrade, drawing into the protective embrace of the Serb-dominated Yugoslav People's Army (JNA) and the nationalist government of Serbian president Slobodan Milošević.

In one of the acrimonious final sessions of Bosnia's federal parliament, Radovan Karadžić, leader of the far right Serb Democratic Party, warned his Bosniak counterpart of the price his people would pay for independence: "This is the path that you want to take Bosnia and Herzegovina on, the same highway of hell and death that Slovenia and Croatia went on. Don't think that you won't take Bosnia

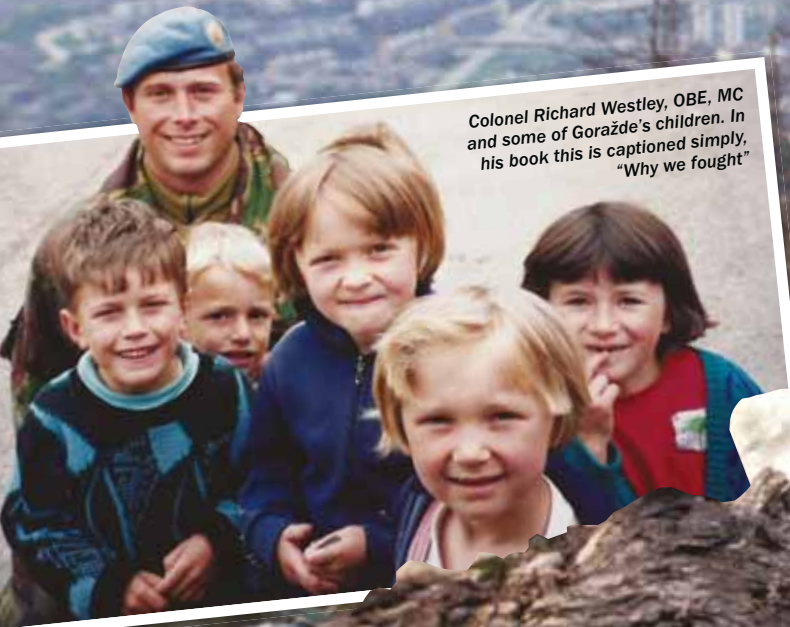
and Herzegovina into hell, and the Muslim people maybe into extinction." With carefully premeditated barbarity Serb militias began to carve off chunks of territory. Armed with JNA weapons and artillery, and led by JNA officers like the infamous General Ratko Mladic, they outmatched Bosnian government forces – a desperate and lightly armed coalition of police, territorial army and untrained volunteers.

Sarajevo was encircled by Bosnian Serbs and exposed to the longest siege in modern history as snipers and artillery pounded the city from the hills, while huge swathes of eastern and northern Bosnia were subjected to the chilling newspeak of 'ethnic cleansing' as Bosniaks were driven from their homes by a deliberate policy of violence, rape and murder, designed to reconstruct Bosnia's hinterland as an ethnically pure extension of Serbia proper.

Flinching from commitment but unable to remain silent while Europe's first genocide since World War II unfolded, United Nations

A Bosnian Serb fighter overlooking the town from high in the surrounding hills

Colonel Richard Westley, OBE, MC and some of Goražde's children. In his book this is captioned simply, "Why we fought"



Security Council Resolution 819 (16 April 1993) and United Nations Security Council Resolution 824 (6 May 1993) declared six Bosniak hold-outs – Sarajevo among them – UN Safe Areas.

Placed under the protection of lightly armed UNPROFOR (UN Protection Force) peacekeepers and the threat of NATO airstrikes against Serb positions, the initiative was immediately toothless. Supply corridors to the Safe Areas were entirely controlled by the Bosnian Serbs who would shake down UNHCR aid convoys and harass UNPROFOR soldiers, a multinational force whose coy rules of engagement (“deter by their presence”, rather than “defend by force”), small numbers and indecisive leadership at the highest levels left them unable to adequately protect the populations under their care.

“There was a real sense of helplessness,” remembers Colonel Richard Westley, OBE, MC. “Here you were, supposedly one of the most professional armies around, subordinated to the UN, which I always found extraordinary. The UN is absolutely critical for legitimacy and accountability, but not to command soldiers on the ground. They should set the policy.

The strategy comes from military people.

But when you’ve got so many different troop-contributing nations it’s very difficult to coordinate, and it had no teeth, and

“THIS IS THE PATH THAT YOU WANT TO TAKE BOSNIA AND HERZEGOVINA ON, THE SAME HIGHWAY OF HELL AND DEATH THAT SLOVENIA AND CROATIA WENT ON. DON’T THINK THAT YOU WON’T TAKE BOSNIA AND HERZEGOVINA INTO HELL, AND THE MUSLIM PEOPLE MAYBE INTO EXTINCTION”

– Radovan Karadžić

therefore it sent peacekeepers into areas where there really wasn't much peace to keep, and if that peace was [worth keeping], it was relative and not absolute."

Unsafe areas

In eastern Bosnia, three land corridors stretched out from central Bosnia like emaciated fingers reaching for the beleaguered UN Safe Areas of Žepa, Goražde and Srebrenica. The populations, swollen with Muslim refugees from the surrounding area, were starved and shelled, but had seen off overwhelming odds thanks to the fierce determination of their defenders, the Army of the Republic of Bosnia and Herzegovina (ARBiH), and what little support the thin blue line of UNPROFOR could muster.

In February 1995, 300 British soldiers from the First Battalion, Royal Welch Fusiliers arrived in Goražde under the command of Lieutenant Colonel Jonathan Riley in order to safeguard its population of some 17,000 people. The bruising experience of earlier peacekeeping efforts had left an impact on the British, who took a more proactive posture despite the limitations of their official role.

Westley – then acting major – led the 100 men of B Company. He tells the story of the British defence of Goražde in his book *Operation Insanity: The Dramatic True Story Of The Mission That Saved 10,000 Lives*, written with Mark Ryan. "We were not given a mission and therefore the battle group planning staff and the company commanders wrote the mission," he tells us. "It was sort of a series of bullets: maintaining the three-kilometre (1.9-mile) exclusion zone; reporting on warring faction activity; supporting the UN agencies and accredited people and their establishments; and the only bit of guidance that was actually given was by [Lieutenant General] Rupert Smith, the force commander [in Sarajevo], who said, 'Your role is to safeguard the civil population as best you can in a war', and that became the order under all those tasks that were written.

"The whole thing was pretty untidy. No mission, poor command and control, and very tenuous logistic support – not only for us in terms of weapons, ammunition etc., but also humanitarian aid. We couldn't get it in and that was one of our key tasks, you know; the delivery of or support to the NGOs. So yeah, talk about being set up to fail."

The landscape too seemed to mirror the vulnerability of First Battalion's position. "My

initial analysis was isolation," says Westley. "Tremendous isolation. It sat astride the River Drina and the main road from Dubrovnik through Višegrad and Sarajevo. It's got bleak limestone mountains to 3,000 feet (914 metres) above sea level around it. Even on a bright sunny day there seemed to be a sort of shadow over Goražde, maybe caused by the high hills, but also a psychological shadow as everyone knew that it was going to happen again – they were going to come back for it."

As winter gave way to spring, clearing the wooded mountains of eastern Bosnia for 'fighting season', First Battalion were expecting trouble. Goražde had come within inches of falling to the Bosnian Serbs in April 1994 and only NATO airstrikes had driven them back from the outskirts of the town.

"If I'm honest, the one thing that was really in the back of my mind throughout this was I know what happens when a town falls in a civil war. You have this built-up animosity, this desensitisation of a population that has been ripped asunder by a couple of years of civil war, and history will tell you that actually not that many people die in direct fighting. It's usually a massing of troops, and will and intent on one side, and [the other side] loses its nerve and that's where lots of people die. We couldn't lose the town. We absolutely couldn't because

HOW YOU CAN SUPPORT REMEMBERING SREBRENICA

Remembering Srebrenica is a British charitable initiative that organises events and raises awareness in support of Srebrenica Memorial Day, held across Europe on 11 July. They support communities and faith groups in holding memorial events across the week of 8-15 July and organise 'Lessons from Srebrenica' visits to Bosnia and Herzegovina, allowing delegates to raise awareness about the genocide, and work towards the rejection of racism, hatred and extremism on their return to the UK.

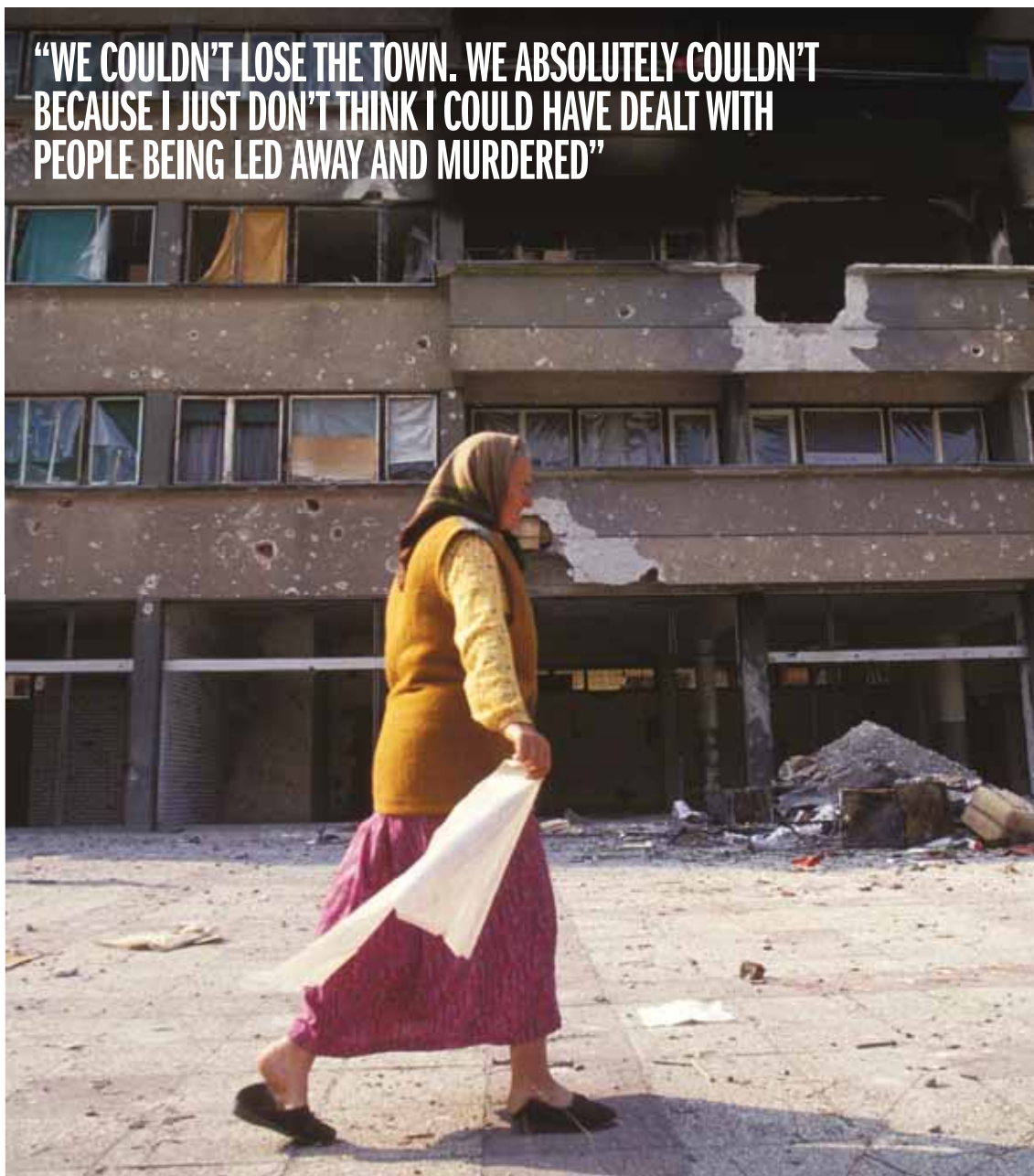
Remembering Srebrenica's biggest ongoing project is fundraising for the first-ever Srebrenica Learning Centre outside of BiH, which would be based in Birmingham. The centre would make the 'Lessons from Srebrenica' project more accessible to people in the UK.

To find out how you can help or to donate, please visit srebrenica.org.uk



Above: Remains of those murdered by Bosnian Serbs at Srebrenica are still being identified

"WE COULDN'T LOSE THE TOWN. WE ABSOLUTELY COULDN'T BECAUSE I JUST DON'T THINK I COULD HAVE DEALT WITH PEOPLE BEING LED AWAY AND MURDERED"



I just don't think I could have dealt with people being led away and murdered."

The gathering storm

Regularly visiting Bosnian Serb positions around the town for sometimes-tense negotiations with his Bosnian Serb counterpart, Westley was able to form a frank assessment of their capabilities: "They were quite well resourced, so they had a lot of troops and the troops were reasonably armed. It depended on their rotation how professional they were. We would patrol every single day because they changed over, to see who they brought on: have they got the real heart and fight as the professionals, or were these a bunch of rag-tags that are just holding at the moment because it's not important? But the one thing they had was the ability to out-range us with their guns.

"They had a fearsome array of artillery, mortars, anti-aircraft artillery depressed into the ground, all of which could engage us from more than five or six kilometres (3.1-3.7 miles) and they were sitting around the town on the high ground, and effectively we had light machine guns and small arms. So I was never fazed by them, but I was aware that, while you can afford to be outgunned because we're more professional than them, you can't afford to be

"THE BRUISING EXPERIENCE OF EARLIER PEACEKEEPING EFFORTS HAD LEFT AN IMPACT ON THE BRITISH, WHO TOOK A MORE PROACTIVE POSTURE"

out-ranged because you just have to sit there and take it. Unless you get air [support]."

The real warning of a coming attack, though, was the arrival of what Westley referred to as the "ethnic cleansing brigade" – hardened paramilitaries modelled on the Chetnik guerrillas of Yugoslavia's brutal early 20th century. "Sometimes you would go up there and there would be these rather avuncular chaps sitting in the front line, and all they wanted to do was have a coffee and slivovitz [brandy] with you, because they've just been told to be there. But what was key was that we were on top of it. We knew whether it was the old boys, in which case we could not relax, but could soften our posture towards them and find out what was happening, or if you walked up there one day and Chetnik Bill's there sharpening his knife and you don't get offered a slivovitz or a coffee

you know, 'right, we need to be a little bit more alert now."

The ceasefire of the previous winter expired on 31 April, and on 8 May General Mladic addressed the Bosnian Serb assembly in its 'capital' of Pale, a town 17 kilometres (11 miles) east of Sarajevo. There the warlord unveiled his grand strategy for the enclaves in eastern Bosnia: "My concern is to have them vanish completely."

The international community fretted. Dutch requests to have Srebrenica reinforced were overruled by the United States, who instead pushed for a complete UNPROFOR withdrawal from the isolated Safe Areas. French Général Bernard Janvier, UNPROFOR's overall commander on the ground, agreed. He told the UN Security Council on 24 May, "The enclaves are indefensible, and the status quo untenable." 1st Battalion, Royal Welch Fusiliers would prove Janvier wrong.

On 25 May, after Lieutenant General Smith's ultimatum to Mladic to withdraw his artillery from the exclusion zones around the safe areas, NATO airstrikes hit military facilities in Pale. Watching the distant plumes of smoke from Goražde, Riley evacuated non-combat personnel to a hideout in the mountains, and the remaining fighting men of 1st Battalion kept watch – Westley's B Company holding the checkpoints and observation posts (OPs) on the east bank of the Drina.

A Muslim woman walks through the battered streets of Goražde

Royal Welch Fusiliers on patrol outside the BRITBAT 2 base



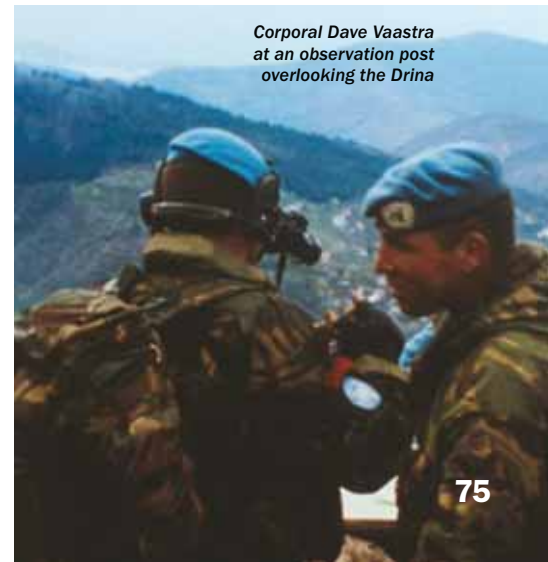
The devastating effects of Bosnian Serb shells hitting Goražde



A photograph from Westley's collection showing a view of the ruined town



Corporal Dave Vaastra at an observation post overlooking the Drina



The battle for OP3

The role of men stationed in an OP – as the name suggests – was to observe, and the idea was that these forward observers on the high ground around the town would be the tripwire that triggered airstrikes, but the British in Goražde were well aware of the UN's squeamishness when it came to direct action. They reinforced OPs with fire trenches, ensured they were constantly manned, and patrolled from OP to OP to extend their footprint across the maximum range of the exclusion zone.

Just as crucially, the ARBiH dug its own trenches and bunkers on the hillside behind them, so that if it came to it they'd be able to take the high ground and deny the Bosnian Serbs positions from which they could shell Goražde with impunity. "It was absolutely vital that they were defensible for a period of time," agrees Westley. "But I always said that it was a finite amount of time because of ammunition expenditure and because they were so prominent [on the hillside]. They were obvious targets. And bearing in mind that most of the town had been registered as artillery targets by the Serbs the year before, it didn't take too much imagination to realise that if they really went for it and coordinated it then we wouldn't be able to hold for that long."

On 28 May the most isolated of the east bank OPs – OP1, which jutted out from the UN lines and offered a vantage point over the southeastern approaches to Goražde – began to register signs of the coming storm. Soon the other OPs and checkpoints began to radio in movement, and on the west bank men of A Company found themselves surrounded and taken prisoner by Bosnian Serbs.

Soon OP1 came under fire from 12.7mm DShK heavy machine guns, PPK light machine guns and the deadly rattle of AK-47s and their Yugoslav variants. B Company had 55 men in total, spread across four OPs, two checkpoints and the Quick Reaction Force in town. With no heavy ordnance, they could call on only eight light machine guns and a few Saxon armoured personnel carriers – little-loved accident-prone veterans of Northern Ireland.

They were facing hundreds of Bosnian Serbs. Maybe as many as 600, with thousands who could be called up from beyond the three-kilometre exclusion zone.

Westley knew OP3 was critical. It overlooked the town, the bridges and the road approaching them. If OP3 were lost, Goražde was as good as in Serb hands, and he knew the consequences would be catastrophic. As the eight men on the vital hill came under fire, Westley got on the radio and urged the liaison officer to rouse 801 Brigade, the ARBiH unit responsible for the defence of the east bank, and sped to Cemetery Valley at the base of the hill to join the Quick Reaction Force.

"I could see better from down in the valley than [the men in the OPs] could from where they were and they were so involved in that close battle," says Westley, explaining his movements. "We could have got up had we needed to bolster, in 20 to 25 minutes. It's a hard climb up there and there's mines on the forward edge of it that had been put there by the Bosnians."

THE BATTLE FOR GORAŽDE

28 MAY 1995

3km EXCLUSION ZONE

HOW TO SAVE A TOWN

Westley's plan for the defence of the east bank was to withdraw the outer OPs and checkpoints as and when they became vulnerable in order to maintain a tightly controlled circle, from which B Company could deny the Bosnian Serbs the high ground at OP3 and keep the fight from Goražde proper.

"I'm just trying to control the movement so that we don't give [the Bosnian Serbs] momentum, because once they get that it's very difficult to stop, plus at the same time the Bosnian army is pouring out of the town and getting up alongside us. So if we can hold the smaller circle for longer, they can come up and bolster us, and then they can then expand out so that the Serb forward observation officers can't get on the high ground to see and adjust the artillery fire." If OP3 had fallen, Westley admits that, though the outlook would have been grim and Bosnian Serb artillery spotters would have direct eyes on the town, the only option was to keep fighting.

"I would have reduced to the bridges and fought on the bridges. I couldn't let them into the main part of the town where the bulk of the population were in. We would have had to just sit there and fight until such a time as somebody decided enough is enough and brought some airstrikes in. There was going to be no ground reinforcement."

-  Bosnian Serb army strongpoint 120 men
-  Bosnian Serb army strongpoint 50 men
-  British observation post (OP)
-  British checkpoint

"WITH NO HEAVY ORDNANCE, THEY COULD CALL ON ONLY EIGHT LIGHT MACHINE GUNS AND A FEW SAXON ARMoured PERSONNEL CARRIERS"

CHECKPOINT 1

Sometime after 3.00pm Sergeant Adrian Kent reports in from Checkpoint 1 that a convoy of Bosnian Serb vehicles, including armour, is advancing slowly down the road. Westley orders them back a couple of hundred metres to a bend in the road.

"Checkpoint 1 is on the road that parallels the river. They didn't just pull back, they actually pulled back to a blocking position. Now there was a problem with one of the Saxons rolling off the road into the river, but they got everyone into the other Saxon and they produced a blocking position," Westley explains.

OP2

At 3.44pm, Corporal Dave Parry admits that they're unable to hold as the Bosnian Serbs have brought up anti-tank weapons. The men defending OP2 are taken hostage, and the main thrust of the attack on OP3 now comes from the direction of the captured OP2.

Parry conceals his radio in his smock, and later that evening reports in to Westley, staying in contact until the prisoners are finally taken out of range.

801 BRIGADE

Like B Company, ARBiH's 801 Brigade is responsible for the defence of the east bank. As soon as OP1 comes under fire, Westley urges them into action from their base in town. Commanded by JNA veteran Salko Osmanspahic, they begin a slow advance up the slopes towards OP2 and OP3, coming under heavy fire from the advancing Bosnian Serbs.

"No doubting their commitment, their families were in the town so they're going to fight, but they just didn't have the weaponry that the Serbs had and that was always going to be a deciding factor. They realised they had to survive any bombardment and to be able to come out and fight, and we had talked with them about how they might do that, but even in the early stage one had to be quite careful that one wasn't seen to be siding with one team or another. They were good enough, and on the day when we were running out of ammunition and had done our bit, they were ready to take over and they took over and did very well. So I suppose the proof of the pudding is in the eating, and when it came down to it they stepped up," Westley says.

QUICK REACTION FORCE

Westley and the Quick Reaction Force are at the base of Cemetery Valley, coordinating the defence and offering fire support from the Saxon. At 2.30pm the Saxon's machine gun turret becomes jammed on a strap from one of the bergens slung around it. Lieutenant Glyn Llewellyn valiantly ignores the incoming fire and scrambles up the Saxon to work it free.

OP3

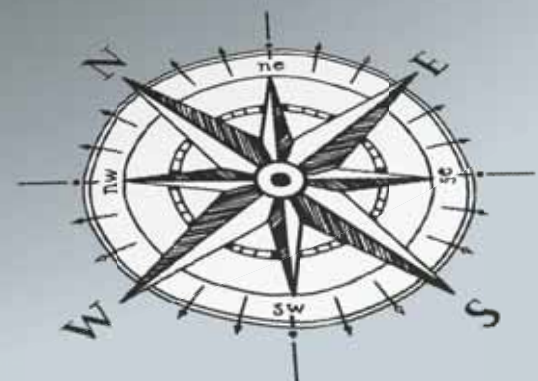
The most strategically vital of the three, commanded by Captain Tom Murphy, OP3 holds out for four and a half hours with supporting fire from the Saxon in Cemetery Valley, before B Company is relieved by ARBiH.

Corporal Dave Vaastra, on his tripod-mounted GPMG, is the first man to fire and the last man to withdraw, and they scramble down the hillside towards Westley and the QRF.

OPI

At 1.05pm OP1, commanded by Colour Sergeant Pete Humphreys, reports a build-up of Bosnian Serbs and comes under fire soon after. OP1 is the most exposed of the east bank OPs, but offers views over the approaches to Goražde that give first warning of the offensive.

At 3.00pm Humphreys reports that they're unable to hold. Westley orders them out and then everything goes ominously quiet. Amazingly Humphreys and his men re-appear after OP3 is relieved, all completely unharmed, having crept through Bosnian Serb lines and back into town.





Children cross the Drina using a walkway under the bridge as cover from Bosnian Serb snipers

General Ratko Mladic, 'The Butcher of Bosnia', directing an attack



"All I would have done was taken my QRF effectively out of the battle and committed them to one side, and I wasn't sure where the main axis [of the attack] was coming as they were attacking on all sides, so I had to really hold that. In the back of my mind also was the fact that we may have to get somebody out and I can't do that if I've set them up on OP3 and OP1. So it wasn't inactivity, it was judging the right time to commit that reserve."

With the Saxon in Cemetery Valley raking the Serbs with bursts from its machine gun, Westley was able to watch mortar and artillery fire fill the air around OP3, and make out ominous streams of Bosnian Serb fighters attempting to close in on the besieged strongpoints in a pincer movement.

At 3.00pm the men at OP1 withdrew and it fell to the Bosnian Serbs. Further down the river Checkpoint 1 followed as a convoy of approaching vehicles – some armoured – made B Company's defence untenable, and Westley ordered them back to a more defensible bend in the road. Only one of the checkpoint's two Saxons made it: the other rolled back into the river, where it became stuck.

Finally, 801 Brigade appeared and began a slow fighting climb towards OP2 and OP3.

At 3.43pm OP2 was surrounded and, facing down anti-tank weapons, its defenders were taken prisoner. Corporal Dave Parry concealed a radio and remained in contact until he finally slipped out of range. The hostages (a total of 250 UN personnel were taken hostage by the Serbs in summer 1995) would be chained to Serb positions as human shields against the threat of NATO airstrikes.

"It was very hard at the time not to launch a raid up there to go and get them back," admits Westley. "But actually, when speaking to Corporal Parry, it was quite clear that the numbers that were around them... I was probably going to ensure their death or injury if I did anything about it."

Against all odds, OP3 held for over four hard-fought hours and handed over to 801 Brigade. With the ARBiH in the field, First

"WESTLEY WAS ABLE TO WATCH MORTAR AND ARTILLERY FIRE FILL THE AIR AROUND OP3, AND MAKE OUT OMINOUS STREAMS OF BOSNIAN SERB FIGHTERS ATTEMPTING TO CLOSE IN ON THE BESIEGED STRONGPOINTS IN A PINCH MOVEMENT"

Battalion withdrew to its base in the town. The ground around the tattered remains of the observation post was littered with corpses, and Westley estimated that between 70 and 120 Bosnian Serbs were killed trying to take the OPs from B Company. Although 33 men had been taken hostage, no Brits had died in the fighting.

"It went to plan and it went to plan for two reasons: firstly, because we held our nerve, and secondly, because the Bosnian Muslims got out of the town so quickly and got an effective move. It wasn't explicit and I couldn't be explicit about it, but [801 Brigade commander] Salko and I had had discussions about how fast he could get people up and how long I could hold, and I told him I thought I could hold for about two hours. We actually held for about four and a half, so I don't think he complained about that. And we were virtually out of ammunition by the end of that."

801 Brigade quickly dug in and fought in the hills for a further three weeks to keep the Bosnian Serbs from the town. "They saw what was left of the observation post as just a target, so they very quickly started extending their trenches. By the time I was able to get up there, four or five days later, to see what was happening, the latticework of trenches they had created was remarkable. The speed at which

they made and bolstered their defences was quite staggering."

The hostages were finally released in the second half of June. Corporal Dave Parry refused to allow the Bosnian Serbs to issue his men direct orders – and was beaten for it – while A Company's Lieutenant Hugh Nightingale was tormented with a mock execution.

The shadow of Srebrenica

With the offensive thwarted, the Serbs responded in petulance and opened up a ferocious bombardment on Goražde – the largest artillery barrage British soldiers had been subjected to since the Korean War, as between 300 and 500 shells a day struck the town.

For a month 1st Battalion sat out the offensive in their bunkers – shipping containers sunk into the ground and sandbagged – and emerged at night to wash, exercise and touch base with the town's defenders, safe from the eyes of artillery spotters. "[For the men it was] very claustrophobic, very boring [and it was] important that myself and the officers got round during the day and spoke to them. I had lots on my mind to keep me busy, they had lots of time to think about it."

"It was tiring because I had to get round every bunker, but it was them I was most worried about because of the noise of being shelled: it is absolutely terrifying and I defy anyone to counter that view when you know you can't move and all you can hear are explosions, loud explosions and shaking, and not knowing whether the next one is going to find a weak point in your bunker. It's wearing, and a month of that, it was bad. As soon as it stopped it was important to get out, talk to the blokes, look into their eyes, see how they were feeling and decide if he needs a bit more help, or he's fine, let's give them something worthwhile to do and all that, and it was very, very difficult. It wasn't just difficult for us, it was difficult for everybody."

On 6 July 1995 Bosnian Serb forces attacked Srebrenica. The ill-prepared Dutch peacekeepers begged for air support, retreated and surrendered, indecisive and overwhelmed.

A Saxon armoured car on overwatch at OP2



Left: Corporal Scouse Hughes at OP3 on the Mala Biserna – the vital ground where the fighting would be fiercest



Deceptively idyllic, Royal Welch Fusiliers patrol the gruelling terrain to enforce the exclusive zone

On 11 July, his victory concluded, Ratko Mladic walked through the streets of Srebrenica, triumphantly handing out sweets to children.

Somewhere between 20,000 and 25,000 refugees clustered around the UNPROFOR headquarters in panic, but the Dutch had no protection to offer. On the morning of 12 July, the Serbs began separating the men and boys from the mass of Bosnian Muslim refugees. The women and girls were packed onto buses heading for government-held territory, and the men were murdered.

In his book Westley described the foreboding radio traffic as an airstrike was attempted and withdrawn, and the first survivor of Srebrenica staggering over the hills to Goražde to tell his harrowing story. "Once the tales from different sources came in and there was a realisation of what happened in Srebrenica, I think for all of us in Goražde it was a sense of 'thank God we held on, and thank God we were postured with our observation posts out'. It was just great sadness and overwhelming relief that it hadn't happened on our watch. By the time the figures came in we'd left [Bosnia], and I remember sitting down at home, hearing these numbers and thinking, 'This can't be right, 8,300?' and then the verification came in. I was feeling totally deflated – a relief that we'd done what we'd done, but just very sad. I could have broken down in tears.

"CORPORAL DAVE PARRY REFUSED TO ALLOW THE BOSNIAN SERBS TO ISSUE HIS MEN DIRECT ORDERS – AND WAS BEATEN FOR IT – WHILE A COMPANY'S LIEUTENANT HUGH NIGHTINGALE WAS TORMENTED WITH A MOCK EXECUTION"

"We fought them and we stopped them taking over the town of Goražde, and so, while I have regrets about the people that died there and the helplessness of the UN force there, at least I haven't got to deal with what the Dutch have to deal with in Srebrenica. I just don't know how they live with themselves: not a shot fired, no defensive posture, allowed them to come in and bus themselves out and then over the next three to five days, 8,300 systematically murdered. That's a hell of a thing to live with."

COUNTING THE COST

At the end of August 1995, the remnants of 1st Battalion left Goražde. It was a tense withdrawal that left them exposed to the furious ARBiH, who feared that abandonment would be the prelude to a renewed Serb offensive, and also the dangerous journey through Serb lines where the risk of ambush and capture was constant. This was a race against the clock as NATO was about to launch an airstrike in retaliation for the bombing of a Sarajevo marketplace by the Bosnian Serbs – the death of 43 by mortar fire was a horror too far after the trauma of Srebrenica.

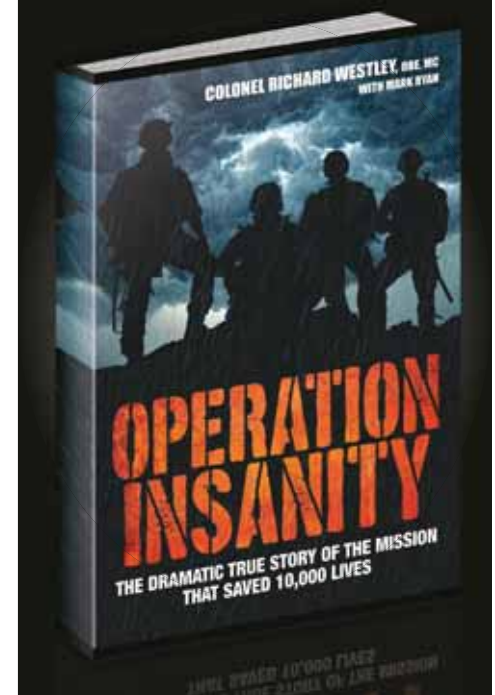
An hour later, Operation Deliberate Force dropped 1,026 bombs on 708 Bosnian Serb targets and forced them into peace talks.

For their courage and steadfastness, 1st Battalion, Royal Welch Fusiliers was awarded the largest clutch of 'peacetime' awards since the Korean War: one Distinguished Service Order, a Conspicuous Gallantry Cross, three Military Crosses – one of which was Westley's, for his leadership during the battalion's tense exit from Goražde – seven Mentions in Dispatches and two Queen's Commendations for Valuable Service.

But there's a greater testament to the valour of 1st Battalion, Royal Welch Fusiliers than any medal. Look at a map of Bosnia and Herzegovina and you see a thin bridge of territory stretching out into the Serb-dominated statelet of Republika Srpska. It's a geographic anomaly that says simply: Goražde still stands.

"It does give me relief, it also gives me a sense of pride actually and it gives me a sense of pride that my soldiers were brave enough to stand and do what I asked them to do. I always believed they were well trained and I loved them to bits, but the fact that they did what they did gives me huge pride and belief because they really did do something quite remarkable. Part of the reason I wrote the book is I wanted them to receive some recognition for it, because they did do something quite extraordinary."

For more of Richard Westley's incredible story, pick up *Operation Insanity: The Dramatic True Story Of The Mission That Saved 10,000 Lives*, written with Mark Ryan and published by John Blake Books.



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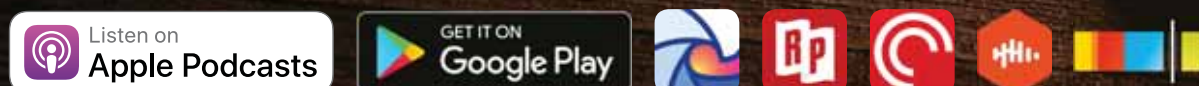
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EVOLUTION OF THE SAMURAI CUIRASS

A new illustrated study explores the strength and beauty of feudal Japan's armour

WORDS & IMAGES TREVOR ABSOLON

The Edo period lasted from 1603-1868. This is a superb example of late-Edo period armour, assembled around a cuirass constructed in the style of a 12th-century yoroi. Revisionist-style sets of armour such as this were typical during the waning decades of the Tokugawa era.



For beauty, precision and strength, nothing has ever matched the combination of form and function found in the armour of the samurai. For a samurai, the consummate warrior, his suit of armour was so much more than just protective equipment that could save his life in the heat of battle – it was the embodiment of his personality, social status and very soul.

In Volume 1 of his two-part series on the armour of the samurai, Trevor Absolon traces

the history of the samurai themselves, and examines the history and evolution of the cuirass, or dou, the armour protecting the samurai's chest. Drawing on over 20 years of research and technical work, the author presents a complete study of this fundamental aspect of samurai armour construction. Over the next few pages, he takes you through a few of the highlights from the book. *Samurai Armour Volume 1: The Japanese Cuirass* is available from Osprey Publishing.



EVOLUTION OF THE SAMURAI CUIRASS

Low-ranking warriors, known as ashigaru, or 'light feet', began to be incorporated into the ranks of most feudal-period samurai armies towards the end of the 15th century. Highly rudimentary sets of basic designs of armour, known as okashi gusoku, or lent armour, were often produced to be issued to these warriors.



Left: An outstanding piece of revisionist armour from the late 18th century. The armour is assembled around a continuous one-piece design of cuirass, referred to as a haramaki, or 'belly wrap', which is made from thousands of small, individual lacquer rawhide scales. Note the full-face mask, or somen.



By the late 17th century, as the role of the samurai changed within Japan, new, less bulky forms of armour were introduced. These sets were often comprised of small rectangular plates of lacquered iron or rawhide joined together by sections of mail. They were commonly referred to as tatami-gusoku, meaning 'folding armour', due to the fact that they could be folded because of the nature of their construction, which made them very easy to store and transport.

This is a highly unusual example of a late 17th-century set of armour that was produced in the Kanagawa region of Japan by smiths employed by the powerful Maeda han Daimyou.

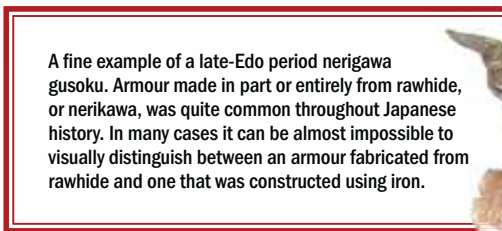


A gorgeous example of a mid-Edo period five-section cuirass or go-mai-dou gusoku. The frontage of the cuirass has been embossed with a superbly executed depiction of a mythical lion-like dog creature, referred to as a shishi. While artistically stunning, embossing work such as this greatly undermined the resilience and battlefield effectiveness of such items of armour.





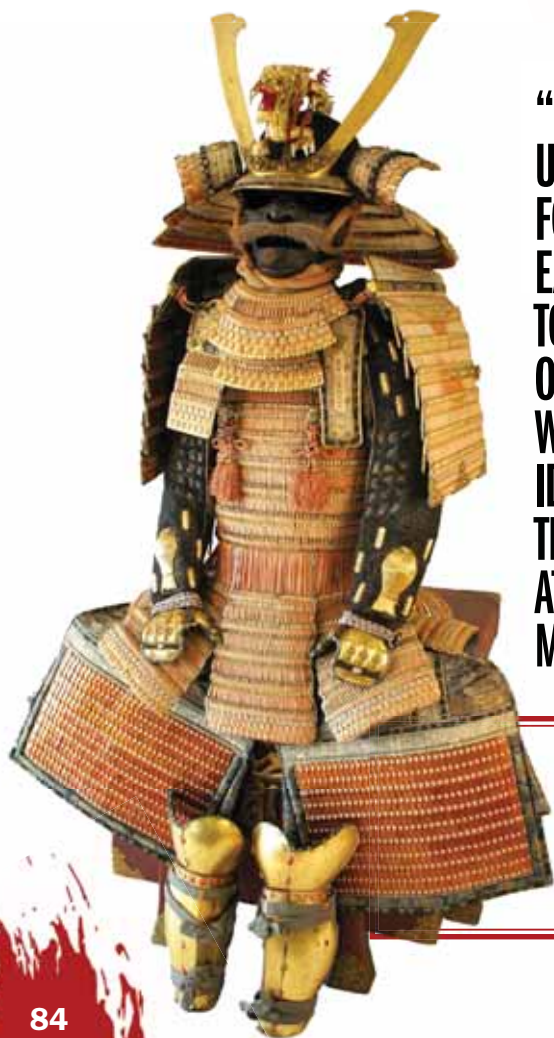
This incredible mid-18th century example of ni-mai-dou gusoku, or two-section cuirass, was assembled using thousands of individual small scales, or kozane. The armour came with matching large and small shoulder guards, or sode, with the large sode being reserved by this time period for ceremony, while the smaller shoulder guards were worn for more practical purposes.



A fine example of a late-Edo period nerigawa gusoku. Armour made in part or entirely from rawhide, or nerikawa, was quite common throughout Japanese history. In many cases it can be almost impossible to visually distinguish between an armour fabricated from rawhide and one that was constructed using iron.



“IT WAS NOT UNCOMMON FOR SAMURAI IN THE EARLY 19TH CENTURY TO WEAR FORMS OF ARMOUR THAT WERE FUNDAMENTALLY IDENTICAL TO THOSE THAT HAD BEEN USED AT THE TIME OF THE MONGOL INVASION”



A superb gusoku, or full set of armour, from the late Edo period. For nostalgic reasons, armour designs in Japan became increasingly old fashioned and archaic in design over the course of the Tokugawa era. Irrespective of many of the incredible technological advances that had been made during the Sengoku period, it was not uncommon for samurai in the early 19th century to wear forms of armour that were fundamentally identical to those that had been used at the time of the Mongol invasion in the 13th century.

Many of the obsolete sets of armour that existed in Japan in the decades following its rapid move to westernisation in the late 19th century ended up being refurbished, like this set. The vibrant colour schemes and other aesthetic details were often changed to suit the tastes of the wealthy foreign tourists and souvenir hunters from Europe and North America, who flooded into the newly opened-up Japan. The Japanese themselves saw little use for such objects by that time.

A mid-19th century example of a gusoku assembled around a cuirass made in the yoroi style. The large panel of stencilled leather, fastened over the chest of the cuirass, was added in order to help prevent the heads of the cuirass's scales from snagging and fouling the bow string of the warrior's yumi when he drew and released an arrow.

**“BUDDHIST ICONS
AND SYMBOLS
WERE COMMONLY
INCORPORATED INTO
THE DESIGNS OF ITEMS
OF ARMOUR MADE BY
THE KATCHU-SHI”**

A simple, yet practical and highly battle-worthy set of early 17th century armour, produced by smiths from the Maeda Han of Kanagawa. The iron plate cuirass, or dou, has been emblazoned with a Sanskrit character. Buddhist icons and symbols were commonly incorporated into the designs of items of armour made by the katchu-shi, or smiths, employed by the feudal lords from that powerful clan of western Japan.

EVOLUTION OF THE SAMURAI CUIRASS



Above: This outstanding armour features a five-section cuirass made in the distinctive Mogami style. The abbreviated lacing and plate construction that was indicative of this form of cuirass initially came about as a way for the hard-pressed armour makers of 15th-century Japan to keep up with the ever-increasing demand. Moving away from the use of small individual scales, and reducing the connective lacing, significantly decreased the amount of time that it took to produce a single set of armour.

“THESE LARGE SHOULDER GUARDS HAD FUNCTIONED AS STATIC SHIELDS TO PROTECT WARRIORS FROM ARROWS”



This set of armour is indicative of the restored forms of armour that were put together to market to Western collectors during the Meiji and Taisho periods (c. 1870-1920). Note the large shoulder guards, or o-sode. In previous centuries these large shoulder guards had functioned as static shields to protect warriors from arrows. Affixing the shield-like shoulder guards in this manner freed up the warrior's hands to utilise his own weaponry, which was the bow throughout much of the early part of samurai history.

This stunning armour embodies some of the features and characteristics that were not uncommon to many armours through the mid 16th century. While incredibly accurate, this set is in fact a modern reproduction. Irrespective of the fact that it was produced by an expert, it demonstrates just how difficult it can be for the uninitiated to differentiate between authentic period pieces and modern reproductions.





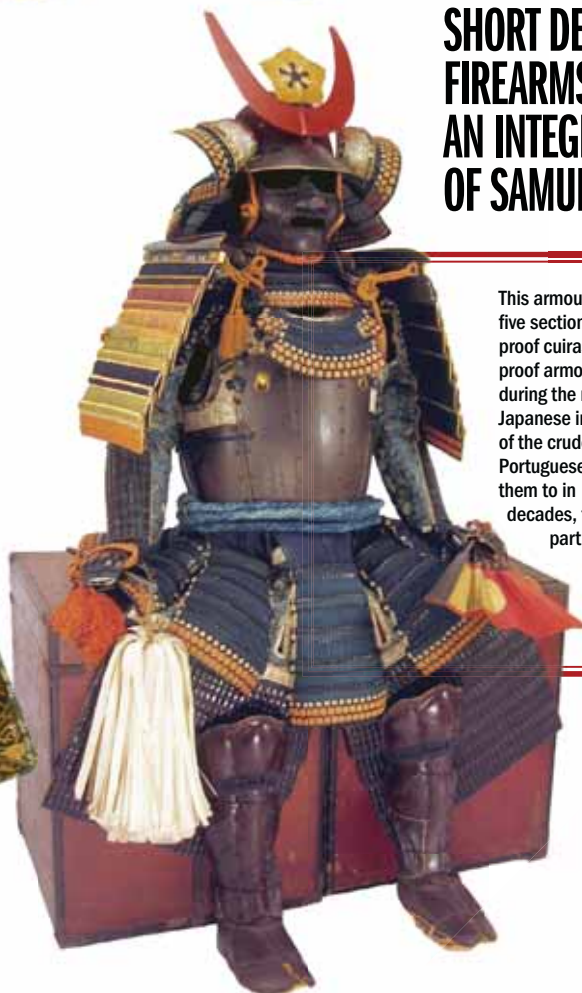
This late-Edo period armour incorporated a number of features from various time periods in its construction, as was common for many items of armour made during the later part of the Tokugawa era. While aesthetically beautiful, many of the incorporated features seen on this gusoku had been obsolete for a number of centuries before it was produced.

This fabulous ni-mai-dou gusoku, or armour formed around a two-section cuirass, clearly embodies many of the aesthetic elements that are indicative of Japanese armour. The Japanese armour makers' incredible ability to balance artistic expression and design with practical functionality can be seen in every aspect of this superb set of armour's construction and finished design.

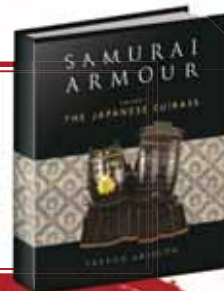


“WITHIN A FEW SHORT DECADES, FIREARMS WERE AN INTEGRAL PART OF SAMURAI WARFARE”

This armour features a sturdy five section, or go-mai-dou, shot-proof cuirass. Demand for shot-proof armour increased substantially during the mid-16th century, after the Japanese improved upon the design of the crude matchlock firearms that Portuguese traders had first introduced them to in 1542. Within a few short decades, firearms were an integral part of samurai warfare, with the first ever recorded use of revolving volley-fire having occurred in Japan in 1575 at the Battle of Nagashino.



Samurai Armour Volume 1: The Japanese Cuirass, by Trevor Absolon, is available now from Osprey Publishing



Left: A fine example of armour constructed around a five-section cuirass made from overlapping horizontal plates that have been riveted together. Contact with Portuguese and Spanish traders in the mid-16th century may have first inspired the Japanese to produce forms of armour that were constructed in this way.



A WARTIME ROMANCE

Madge and Basil appeared on a Remembrance Sunday special programme of the BBC's *Strictly Come Dancing* and will be celebrating their 70th (Platinum) wedding anniversary on 16 October 2018

Married couple Madge and Basil Lambert describe how they met while they were serving during the Burma Campaign in 1944

The war in Burma was a savagely fought part of WWII. British-led Allied forces waged a desperate campaign in Burmese jungles to prevent Imperial Japan from entering India. But in this unforgiving environment love was able to blossom. In 1944 Madge Graves was a nurse in the Voluntary Aid Detachment (VAD) while Basil Lambert was an Indian Army officer seconded to the Royal Engineers for logistics work. Both were stationed in Chittagong, which was a frontline town in the Southeast Asia theatre. Chittagong was a vital base for Allied forces and close to battle zones against Japanese forces.

It was in this fraught atmosphere that Madge and Basil met and began a romance in 1944. Although Basil was posted to Rangoon in early 1945 and later to Saigon, the couple stayed in touch and were reunited in England in 1947. They married the following year and have been together ever since.

Now approaching their 70th wedding anniversary, Madge has co-authored *Some Sunny Day* with journalist Robert Blair about her wartime romance. Both Lamberts tell the story of how they met and their individual experiences in the 'forgotten war'.

MADGE LAMBERT

How did *Some Sunny Day* come to be written?

We had been to Whitehall and had tea in Westminster Abbey gardens as members of the British Legion and Burma Star holders. Our younger daughter happened to speak to Bob Blair and told him we'd been in Burma. We don't talk about it much, but he said, "That sounds like a story to me." He came down to

talk to us and then rang practically every day for months. We would never have attempted to do it ourselves. Although he'd written for different newspapers he'd never written a book. This is Bob's first book and he's been wonderful.

How did you become a VAD nurse?

I was working at Stoke Mandeville Hospital and a notice came around calling for VADs for service in India. A friend said, "Why don't we go?" Three of us volunteered and out of the whole country 200-250 were chosen.

We went to India House for interviews. Lady Mountbatten interviewed us and said, "I hope you're prepared for it if you get accepted." When I signed on they said, "We can't take you, you're not 21."

I went back to the hospital, and by then it was just five days before D-Day. It was empty because they were preparing for wounded troops coming in from Europe. We got busy, but I received a notice from India House to report for an onward transport to India. I got in touch and said, "I'd like to go but I'm not 21." However, they replied, "You will be when you get there." I went through the Bay of Biscay on my 21st birthday. I was very homesick and was the youngest volunteer in transit.

What were your first impressions of India?

It was the smell more than anything! We had about two to three weeks in Poona so we could acclimatise to the weather, because it was such a different world. We then travelled to 56 Indian General Hospital in Chittagong, which took about three or four days.

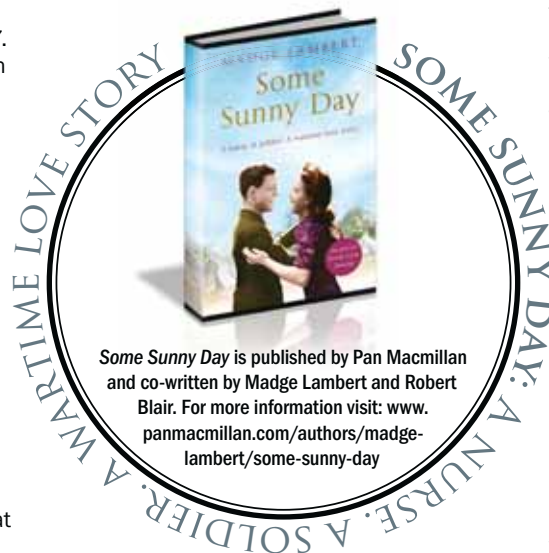
What were conditions like at Chittagong Hospital?

The whole complex was made of bamboo. There were no windows, just shutters that dropped down. The only decent place was the local governor's home. That was used as our mess although we nurses lived in bamboo huts.

What were the conditions of the soldiers you treated?

We mostly had Indian and British troops coming in. The boys were wonderful. You didn't get a lot of moaning and groaning except from the ones who were in a really awful state. When anything happened they always looked on the bright side, which was really amazing in a place like that.

However, we had a Japanese ward, and when you went to treat them they spat at you. We



Some Sunny Day is published by Pan Macmillan and co-written by Madge Lambert and Robert Blair. For more information visit: www.panmacmillan.com/authors/madge-lambert/some-sunny-day

Madge and Basil on their wedding day at Horsell Church, Woking, 16 October 1948

Christmas 1945 at 56 Indian General Hospital at Chittagong. The hospital was primitively constructed out of bamboo

had guards in the ward to make sure we were protected, so they'd kick their beds in reply.

Did you work at a casualty clearing station?

Yes, at Cox's Bazaar. I was there for six weeks. It was where casualties came straight from jungle hostilities and were diagnosed. If they just required a bandage they stayed for a day or so and returned to their units. Or it could be decided they needed to go to hospital or home.

Nurses were only allowed six weeks there because you were continually on stand-by duty. It was tented, and the forces were absolutely everywhere because it was a bad time then. The monsoon was on and rain was practically running through the middle of the tents, so it wasn't pleasant.

Were you close to artillery bombardments?

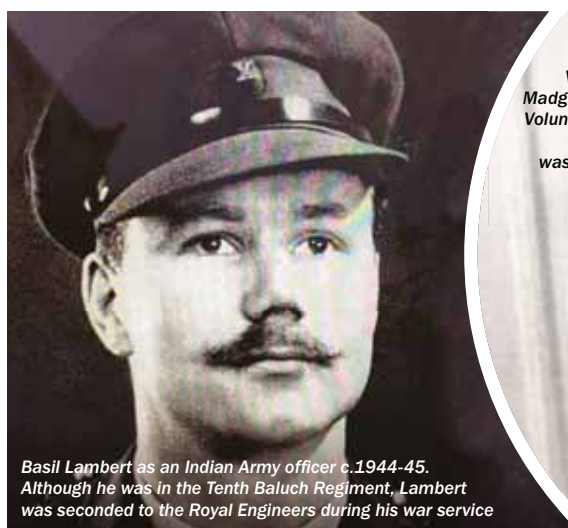
Yes, but we didn't know that. We thought it was thunder, but we discovered afterwards that it was from the lines and it was guns! You could particularly hear them in the early morning.

How did you meet Basil?

It was difficult in Chittagong because there were virtually no shops. I wanted stamps and an army friend called Mack said, "I've got some stamps". We went to a room and Basil was sitting working with his feet up. He just raised his eyes, said 'Hello' and went back to the work. He did get up before I left but I said to Mack, "Who does he think he is?" Mack said, "Don't take any notice of him."

Then a day or two afterwards I had a note through my door from Basil asking to take me out to dinner. I thought, "Well, he's making up for it," and that's how we first really met.

Right: Basil Lambert (sitting in chair, second from right) with other members of 'Movement Control' in Saigon, January 1946. Basil worked with armed Japanese POWs to ensure the smooth running of Saigon's docks



Basil Lambert as an Indian Army officer c.1944-45. Although he was in the Tenth Baluch Regiment, Lambert was seconded to the Royal Engineers during his war service

Madge Graves in her VAD nursing uniform. Madge volunteered for the Voluntary Aid Detachment at the age of 20 and was interviewed by Lady Edwina Mountbatten



A WARTIME ROMANCE



Madge (far left) with patients in Ward 11, Stoke Mandeville Hospital, 11 May 1943. The future Mrs Lambert treated wounded servicemen in the aftermath of D-Day before departing for the Far East



Basil (left) with his younger brother and fellow officer Brian outside their improvised quarters in the Far East, 1946



Madge (second step up, far left) returned to England on MV Georgic in 1946. She wouldn't reunite with Basil until the following year

How did you stay in contact with Basil after he was posted to Rangoon?

We wrote a lot but you never knew when you were going to get mail – it either came in a big batch or not at all. We decided to number the letters so we could read them in the right order.

To what extent do you think that the Burma Campaign was 'the forgotten war'?

War is horrible and we did our job the best we could. We knew that we'd almost been forgotten about when Lord Mountbatten said, "I don't think you were forgotten because nobody knew you were there!"

BASIL LAMBERT

How did you become an Indian Army officer?

My brother and I joined up in August 1941. We volunteered, which was the wrong thing to do because you should never volunteer, but one does. Some of us were recommended for a commission and then we agreed to go to India.

I was in the 10th Baluch Regiment in the Indian Army, in northwest India. However, I never went up there or did anything with them because I was seconded to 'Movements and Transportation', which was the Royal Engineers. I was in movements work the entire time and was in Burma until my demobilisation in 1947.

What was your job when you were seconded to the Royal Engineers?

When we received instructions that supplies, troops, ammunition were being transported – it was our job to make sure they were delivered. They used to call it 'lines of communication' but it's now called logistics. We were at the forward base in Chittagong. My job was to make sure that everything worked at the railway station. It was a liaison job as much as anything else.

How close were you to Japanese positions?

We were effectively the first echelon behind the fluid front line, except that we didn't have a front line. You could have been killed by the Japanese, who might only have been a few feet away behind the bamboo, trees or bushes.

My job kept me in Chittagong and there was a lot of movement of supplies and troops going through. The Japanese were in the jungle around us, and we wouldn't know where they were.

Did you encounter the Japanese during the war?

I only met the Japanese when the war was over, in Saigon. I worked on the waterfront near the docks, and our job was to control the shipping. The troops were meant to disarm the Japanese and take over the installations, but

"WE VOLUNTEERED, WHICH WAS THE WRONG THING TO DO BECAUSE YOU SHOULD NEVER VOLUNTEER, BUT ONE DOES"

the numbers we had were vastly insufficient. The commanding officer asked permission to leave the Japanese armed and let them do the guard and security duties.

We got the permission and the Japanese were then told about what was required, which I think pleased them no end. They were not disarmed. Every time I went to my desk in the morning a Japanese officer came in with a fully armed escort, saluted and "Sissed" at me. I didn't know what that meant for a long time but was told afterwards it was a mark of respect.

What are your memories of meeting Madge?

Madge came in with this other officer and I just turned around, saw her, said hello and carried on reading. It was a surprise to see a lady there in the first place. I then sent her a note asking her out for a meal, which she accepted. At that time it wasn't a romance, it was simply two people who were able to talk together when our duties permitted.

How did your relationship develop in Chittagong?

The distance between us was half a mile (0.8 kilometres) down a jungle path so we had to be careful each time we met. We were able sometimes to go for a meal or to the cinema. It was flea-bitten but it was better than nothing. I remember it was very iffy because we'd both have to come off duty at the same time. We took our chances when we could, and those chances were normally not very long.

Can you describe how you managed to telephone Madge after you were posted to Rangoon?

I'd been in Rangoon for a week and spoke to this officer in the Royal Signals. I wanted to speak to Madge in Chittagong and he said, "It's too far away." I asked if he could try and he said he'd see what he could do. He got on the phone and built up a continuous signals system bit by bit up to Imphal, which was nearly 1,000 miles (1,600 kilometres) from Rangoon. He then had to come down to Chittagong, so the call distance was roughly 1,200-1,500 miles (1,900-2,400 kilometres) long. He told me that he'd got through and was online. Madge was told she'd got a telephone call and we were very fortunate

to talk for two or three minutes. That was it, but it meant an awful lot to both of us. I take my hat off to the Royal Signals.

How did it feel to be reunited with Madge?

It was difficult to know how to react, having not seen her for 18 months. We don't remember whether we fell into each other's arms or just politely shook hands, but it was a happy meeting to begin with and it got better as the months went by. It was about 20 months after I got home that we got married.

To what extent do you think the Burma Campaign was the 'forgotten war'?

We were second best in terms of attention during the war, but we would not have known that. All we knew was that if General Slim asked for reinforcements they would only be provided if they weren't required in Europe first. When supplies were authorised they had to come by ships and it all took time.

I think it would do no harm to make it known how difficult it was for the Allied troops out there in Burma. They were fighting a war that they knew people at home comparatively didn't know about. We literally didn't know from day to day what was going to happen. We could have been overrun at any time. If the Japanese had managed to get past our own troops they could have gone anywhere they wanted to. We had to stop them from taking India, and it wasn't an easy job.

What is the secret for 70 years of marriage?

It's largely give and take and working to overcome any problems. We've had our rows like everybody else did, but we've got two lovely daughters who now look after our welfare.

ALL WHO SERVED, SACRIFICED, AND CHANGED OUR WORLD

1918 - 2018

Thank you

The Lamberts are members of the Royal British Legion. To mark the final year centenary of WWI, the Legion is launching a national movement of activities between 8 August-11 November 2018 to say thank you to the WWI generation who served, sacrificed and changed our world. For more information visit: www.britishlegion.org.uk/remembrance/ww1-centenary/thank-you

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REVIEWS

Our pick of the latest military history books to hit the shelves

AELFRED'S BRITAIN

MAX ADAMS INVESTIGATES THE MONARCH WHO STAGED A DARING COMEBACK AGAINST THE NORSEMEN AND CHANGED THE FACE OF THE BRITISH ISLES

Author: Max Adams **Price:** £9.99 **Publisher:** Head of Zeus

More than 1,000 years ago, a great host of battle-hardened Norse seafarers pitched up on England's eastern coast. They soon overwhelmed East Anglia with terrifying swiftness and then proceeded to lay the north to waste. That was in 865 CE. Six years later these same raiders penetrated deep into the kingdom of Wessex, ruled over by a new and untested monarch, Aelfred. The wave of death and destruction unleashed by the invaders brought on the air of a world-ending apocalypse.

In meticulous and scholarly detail, author Max Adams describes these merciless vandals as "feral men, playing by a new set of rules and bent on theft, kidnap, arson, torture and enslavement" – a not unreasonable portrayal, judging by the behaviour of the rampaging Norsemen.

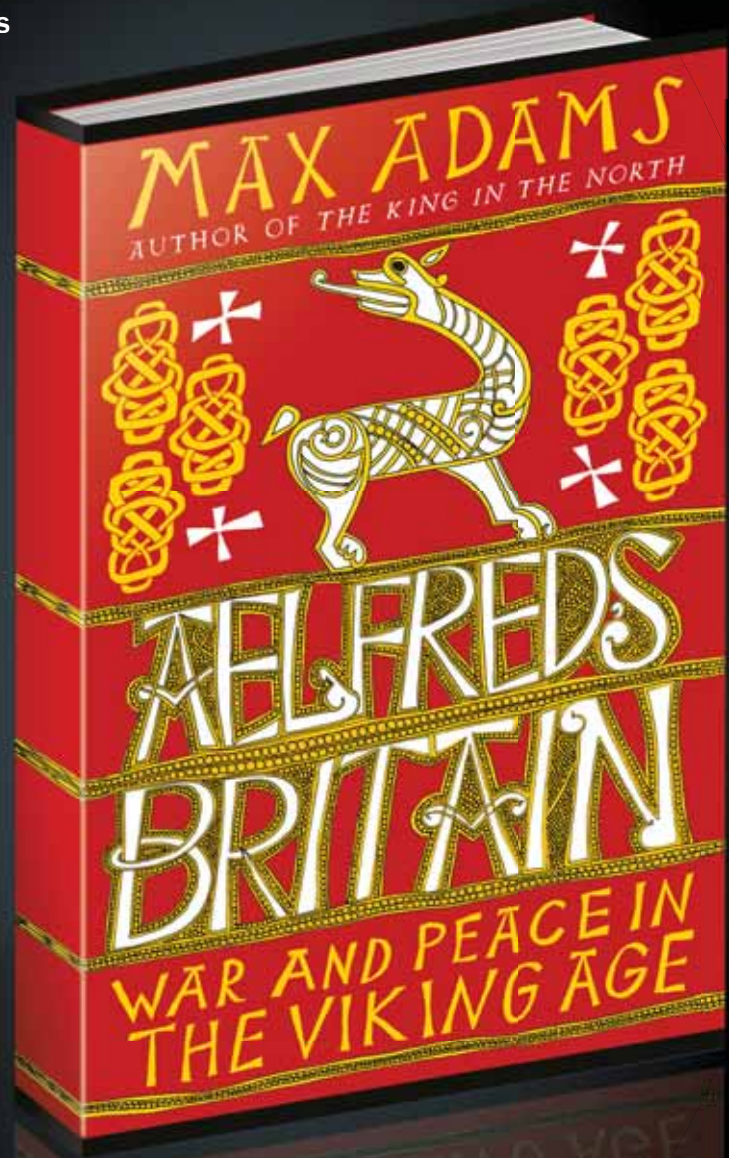
Why did they come? What forces motivated them to make the treacherous crossing to take up arms in an unknown land? Adams cites social and economic forces, like the inexorable growth of the Christian Frankish empire under Charlemagne, which led to a fateful clash of cultures between the inheritors of Rome and the northern world that saw the Holy Roman Empire as a threat. The author also mentions a perhaps more persuasive driving force, namely the limited cultivatable lands of Scandinavia, which were proving insufficient to provide for a growing, outward-looking population in need of land to farm and on which to raise a family.

We know that by the 9th century, the Scandinavians had perfected the art of shipbuilding. By 800 CE they had fast, oceangoing vessels superbly adapted to coastal trade, as well as raiding. At that time, Aelfred came to the throne, the only English king to have earned himself the epithet 'Great'. This monarch learned, through defeat, disloyalty and the humiliation of flight, to counter the threat facing his kingdom. He saw how to exploit adversity, to enhance the power of the Anglo-Saxon state by professionalising it.

"Aelfred," the author tells us, "was something more: a soldier-philosopher in the mould, perhaps, of Marcus Aurelius, an administrative reformer whose experience taught him the art of the possible". He was also a passionate educator and expert in the deployment of his powers of patronage to initiate his own renaissance. Snatching victory from the jaws of defeat, this great English king was able to stage a brilliant comeback at the Battle of Edington in 878 CE.

Adams pays tribute to Aelfred not only as a valiant and successful soldier, for after the decisive victory at Edington this monarch embarked on a programme of economic, military and education reform that deserves to be compared with the Frankish renaissance under Charlemagne. He entertained exotic visitors at court and chronicled the history of his people and age, while churches and their saintly cults were patronised. Above all, the painful lessons Aelfred the warrior-king had learned from his long-time enemy were put to good use in the series of defended garrison towns he ordered built across the south of England.

Aelfred's Britain, expertly described in the book, was a cultural and political patchwork quilt, rich in the regional languages, customs and lordships of its kaleidoscopic components. "The Britain of his children," the author maintains, "was no different".



"AUTHOR MAX ADAMS DESCRIBES THESE MERCILESS VANDALS AS 'FERAL MEN, PLAYING BY A NEW SET OF RULES AND BENT ON THEFT, KIDNAP, ARSON, TORTURE AND ENSLAVEMENT'"

ARMS & ARMOUR OF THE MEDIEVAL JOUST

A SUPERB GUIDE TO THE DANGEROUS, GLAMOROUS AND OFTEN LETHAL MARTIAL TRADITION

Author: Tobias Capwell **Publisher:** Royal Armouries Museum **Price:** £9.99

For most people, the word 'joust' will conjure an image of elaborately armoured knights charging at each other during extravagant pageants, perhaps carrying a silk scarf donated by a fair maiden – in short, a Hollywood version of history. In this slim but action-packed volume, Tobias Capwell explains how such pageantry was only one part of the story of the joust, a military tradition that evolved and endured for 500 years.

The title of the book is misleading. This is not merely an investigation of arms and armour, it also delves into the philosophy of the joust and considers the practicalities of this form of ritualised combat. Space is at a premium, because the book runs to just 96 pages and is generously illustrated, but Capwell's writing is so succinct he is able to impart a huge amount of information. After an hour with this book you feel like you have a thorough grounding in the subject.

The revelations are at times startling. Early jousts, for instance, were undertaken with regular battlefield weapons, including sharp spears. Inevitably, there was huge potential for gruesome injury or death, especially as the head was a prime target. Helmets during the early period of jousting offered almost no protection for the face, making the undertaking of a joust a true test of bravery and skill.

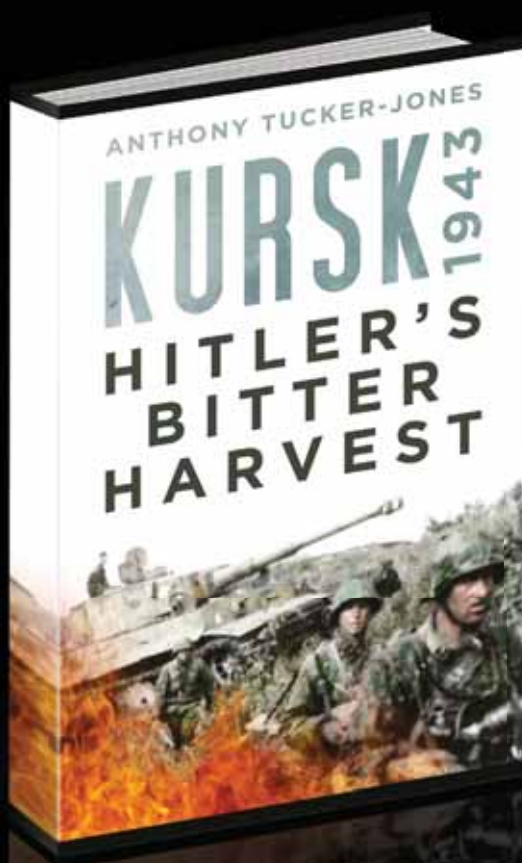
Blunted spears were introduced in the 13th century and this started a process whereby the arms and armour employed steadily evolved until they bore little resemblance to those seen on the battlefield. Jousting also split into two

forms: 'à plaisance' and 'à outrance'. The first, also known as the 'joust of peace', saw the development of heavier armour and helmets, impractical for the battlefield. The latter, the 'joust of war', retained regular battlefield equipment and often took place between enemy knights, even during periods of peace.

Although fundamentally a means of practising martial skills, the joust (especially the joust à plaisance) drew criticism for deflecting a knight from his true purpose of fighting and killing the enemy. By the 15th century, the commentator Alonso Cartegna was dismissing it as "more a show of ostentation and wealth than of virtue". Capwell himself states that the joust of peace eventually became "so abstracted from any battlefield application that it ceased to have any meaning," dismissing it as "a pillow fight".

It was still a pillow fight few would have the stomach for today, with the risk of injury present even at the most highly evolved levels of the joust à plaisance. There was also an acceptance that modifications had gone too far, and elements were introduced to reinvigorate the joust of peace, including weaponry designed to look like the real thing but slyly incorporating safety features.

This is a fascinating book, written by an expert (Capwell has trained professionally in jousting) in a highly accessible manner. Alongside the beautiful illustrations and photography, this combines to form an excellent guide to the subject, which for many will be all that is needed.



KURSK 1943 HITLER'S BITTER HARVEST

AN ENGROSSING AND DETAILED ACCOUNT OF THIS CRITICAL BATTLE

Author: Anthony Tucker-Jones **Publisher:** The History Press **Price:** £25

The Battle of Kursk marked a turning point in World War II. Following their defeat at the hands of the Soviets, the Germans were never again able to mount a strategic offensive on the Eastern Front. As such, it has been widely studied and written upon, but there is always room for new interpretations.

Anthony Tucker-Jones, with the benefit of newly translated eyewitness testimonies, has chosen to give us an intensely personal account to offer new perspectives. The result is a highly readable book that takes you deep into the planning and implementation of the battle on both sides.

Tucker-Jones is able to convey the growing sense of frustration and even desperation among the German High Command as the ideal time for launching Operation Citadel, mid-April,

comes and goes while Hitler dithers, refusing to consider a flexible defensive posture and insisting on a bold offensive. Many German generals had a sense of dread as the operation approached: "We're simply hastening to meet our doom," said General Alfred Jodl, "but the man who is leading us is our destiny, and one does not escape one's destiny".

With the Russians well informed of German plans thanks to intelligence from British sources, Citadel was an offensive operation for less than two weeks before the Russians turned the tables.

Tucker-Jones takes you into the heart of the action, but for those unfamiliar with the battle, a more wide-ranging introduction (perhaps accompanied by a map) would have been useful in setting the stage.

FUEL, FIRE AND FEAR

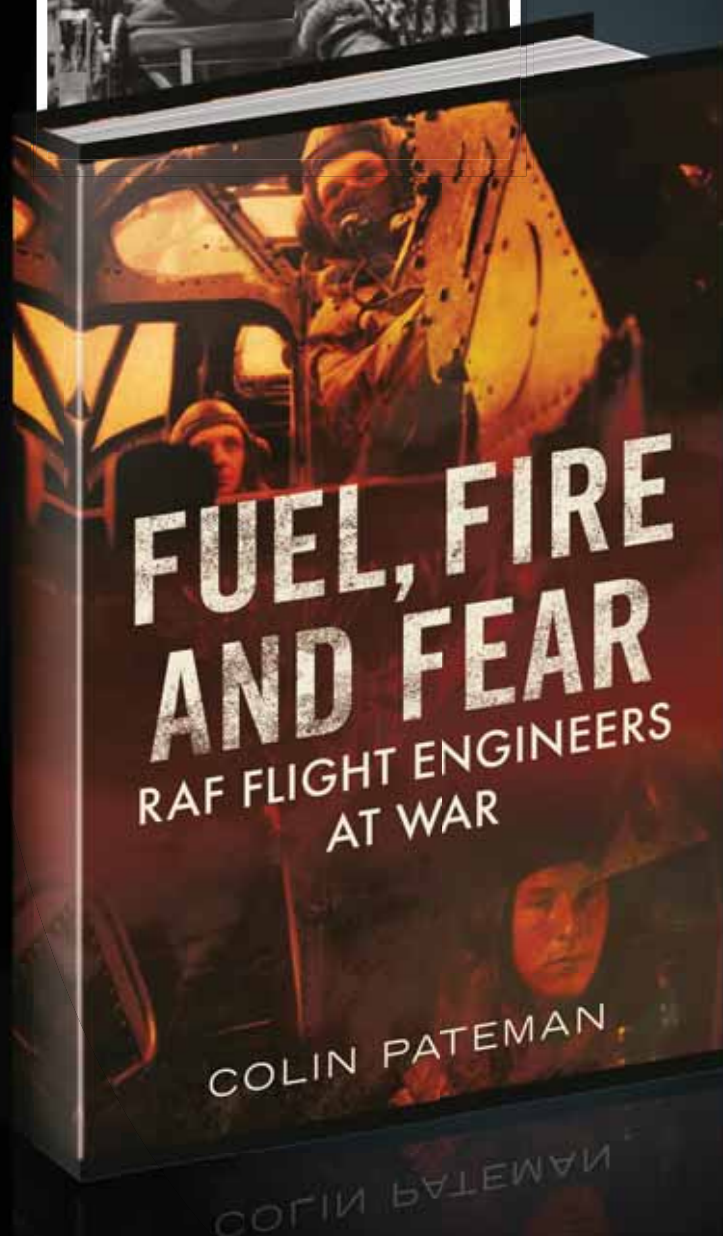
RAF FLIGHT ENGINEERS AT WAR

COLIN PATEMAN EXAMINES THE ROLE OF FLIGHT ENGINEERS ABOARD BRITISH BOMBERS AND MARITIME PATROL AIRCRAFT DURING WORLD WAR II

Author: Colin Pateman Publisher: Fonthill Media Price: £25



A flight engineer aboard an Avro Lancaster. Lancasters and four-engined bombers were complicated machines that required a flight engineer to assist the pilot



In a niche that is flooded with memoirs, squadron histories, books on particular raids and histories of specific aircraft types, Colin Pateman's book finds a genuinely new and interesting angle from which to examine the RAF in World War II. He takes a single aircrew trade – flight engineer – and examines its role and development from organisational, technical and personal points of view.

The trade of flight engineer was formalised during World War II as a reflection of the increasingly complicated nature of the modern – especially four-engined – bombers and maritime patrol aircraft that were coming into service. Initially, such large aircraft flew with a second pilot, or 'second dickie', often a newly qualified pilot building up air experience before receiving command of their own aircraft. They assisted the aircraft captain with the controls during the take-off and landings, and for the rest of the flight monitored the many systems that kept the engines, fuel system, hydraulics and numerous other elements running smoothly.

However, this was a wasteful use of trained pilots, of which there was always a shortage in the early years of the war, and so ground engineers began to be carried to fulfil those duties. They had the necessary technical skills to monitor and understand the numerous dials and switches that controlled so many of the aircraft's systems, and also to implement rudimentary repairs should anything go wrong. In 1942 these ground engineers officially became aircrew as the trade of flight engineer was established.

The book starts with two chapters on the training of technical personnel in the inter-war and early war period. Both of these chapters feel like they were written in a rush, and distinctly lack polish. However, from the third chapter Pateman finds his pace. The book alternates between chapters from three main themes. One is the development of the trade, including interesting details on how flight engineers were selected and trained, and then how they were fitted into the crew.

The second is the work of the flight engineer and the technical background to their trade. These are fascinating, if sometimes dense in detail, giving real insight into what the flight engineer actually did and how important it was to the operation of the aircraft. Beyond this, Pateman delves into the minutiae of areas such as how the fuel systems actually worked on heavy bombers, and why monitoring them and balancing the fuel tanks was such a critical task, as well as the history of some of the elements, such as the development of self-sealing tanks.

The final thread is biographies of selected flight engineers, pulling the other two threads together with a human angle to follow their careers and experiences. The majority of the book considers the flight engineers of Bomber Command, although the last few look at the very different experiences and challenges faced by those men who served with Coastal Command.

Overall, this is an interesting book for those who want a deeper understanding of how these aircraft were actually flown and operated.

"IN 1942 THESE GROUND ENGINEERS OFFICIALLY BECAME AIRCREW AS THE TRADE OF FLIGHT ENGINEER WAS ESTABLISHED"

THE BRAMALL PAPERS

REFLECTIONS ON WAR AND PEACE

FIELD MARSHAL THE LORD BRAMALL'S WRITINGS ARE A VALUABLE WORK OF MILITARY PHILOSOPHY FROM ONE OF BRITAIN'S MOST EMINENT VETERANS

Author: Field Marshal Lord Bramall (ed. Robin Brodhurst)

Publisher: Pen & Sword Military **Price:** £25 (Hardback)

The military world was a very different place 75 years ago, although it was also the period that created modern warfare. During World War II Britain was still the dominant naval power but jet fighters were being introduced and atomic weapons made their first appearance. It was into this apocalyptic crucible that many professional soldiers began their careers, but very few are alive today who continue to make highly informed opinions about military affairs. Nevertheless, Field Marshal Lord Bramall is one of them.

With fighting experiences that stretch back to the 1940s, Bramall has had a remarkable career. He first fought in Normandy as a junior officer and received the Military Cross in March 1945. His subsequent service was a glittering litany of appointments and commands that included serving on Lord Mountbatten's staff and commanding a battalion during the Indonesia-Malaysia Confrontation.

Between 1979-85 Bramall rose to become the professional head of both the British Army and British Armed Forces as chief of the General Staff and chief of the Defence Staff respectively. In the former role, Bramall strongly supported the successful San Carlos landings during the Falklands War.

This highly decorated field marshal is consequently no ordinary veteran, and his book *The Bramall Papers* is a fascinating insight into one of Britain's foremost military minds. With a foreword by Sir Anthony Seldon and edited by Robin Brodhurst, *The Bramall Papers* is a wide-ranging collection of lectures, speeches and letters dating from the 1950s to the present day. It is a serious study into the intensely complicated realities of modern warfare and its implications.

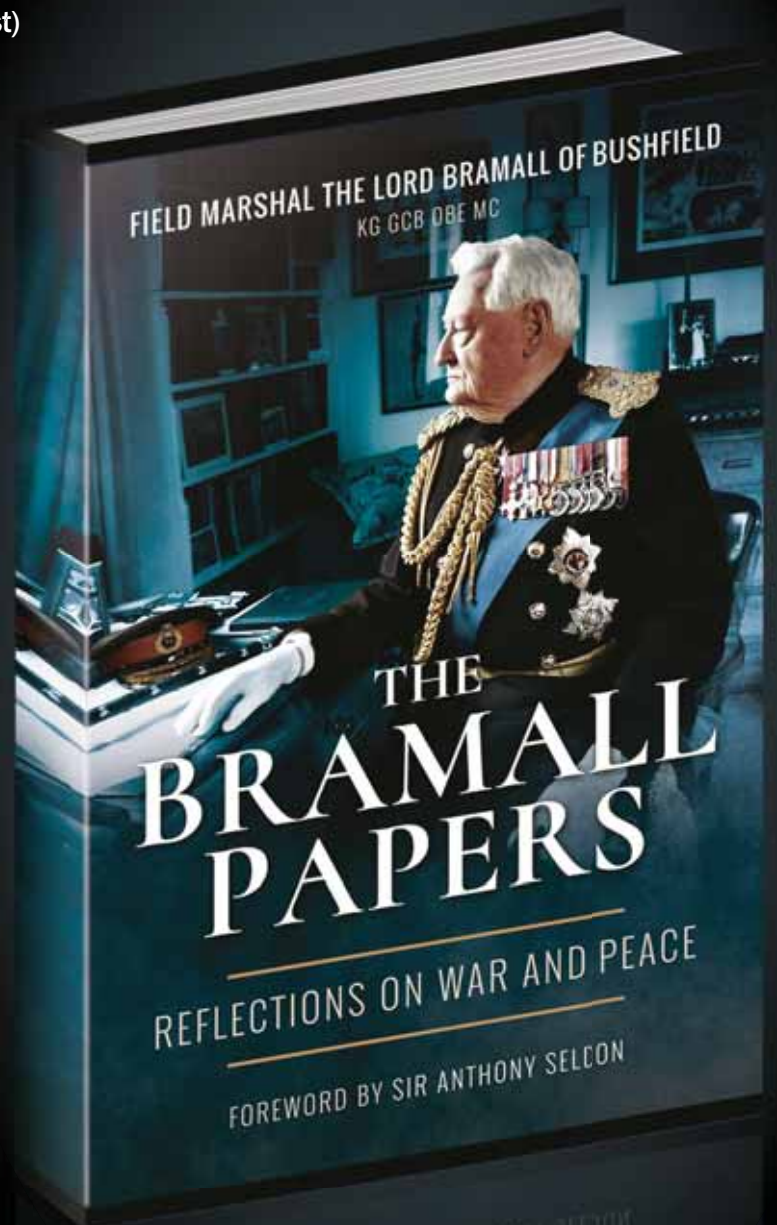
The book is initially structured chronologically and covers World War II and the Cold War, with Bramall being heavily involved in both. His perspective on World War II is interesting because he approaches his own experiences from a broader historical outlook rather than as a direct veteran testimony. Nevertheless, it is clear that the war left an indelible impression on him.

This is apparent in the larger part of the book where Bramall's ideas on modern warfare are wide-ranging. His varied experiences at the top rank of military power give him an authoritative yet humane voice on everything from terrorism, insurgencies, peacekeeping and interventions, among many other topics.

Perhaps the most striking aspect of Bramall's philosophy is his opposition to nuclear weapons. The book makes clear his case for the slow, steady disarmament of Britain's deterrent in order to set an example to other nuclear powers.

It is bold ideas such as these that make *The Bramall Papers* an indispensable book for military academics and professional officers alike. Although war is characterised by extreme destruction, the best soldiers never forget that armed forces have a moral duty to prevent conflict. As Bramall himself succinctly puts it, "Force must be considered a strategy for peace quite as much as it has always been for war."

Lord Bramall's coat of arms. His former position at the very top of the military table allows him to give great insight into military matters



"IT WAS INTO THIS APOCALYPTIC CRUCIBLE THAT MANY PROFESSIONAL SOLDIERS BEGAN THEIR CAREERS, BUT VERY FEW ARE ALIVE TODAY WHO CONTINUE TO MAKE HIGHLY INFORMED OPINIONS ABOUT MILITARY AFFAIRS. NEVERTHELESS, FIELD MARSHAL LORD BRAMALL IS ONE OF THEM"

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The armoured clashes on the Eastern Front, from Operation Barbarossa to Operation Citadel, were among the most devastating and significant battles of WWII, which eventually saw the turning point of the war against Hitler. On the frontline, medium and heavy tank crews tested one another's tactics, as well as the strength of their armour and sheer nerve. The tank doctrines of the USSR and Nazi Germany were also put to the test.

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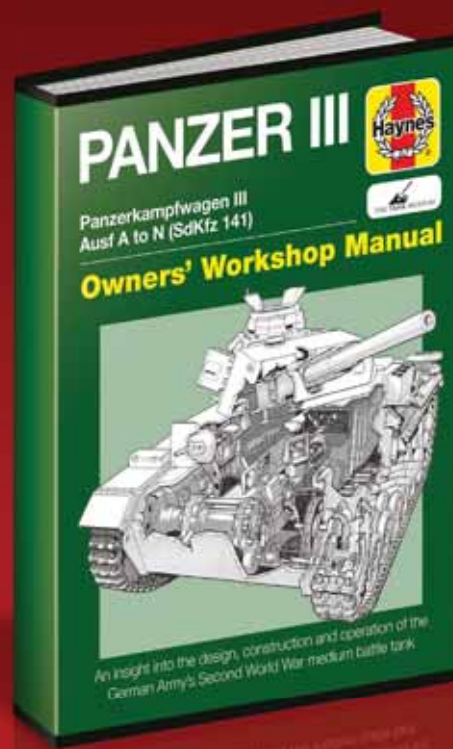
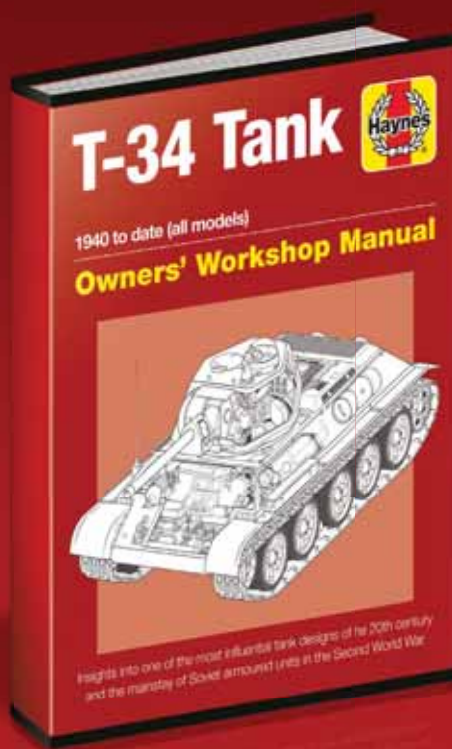
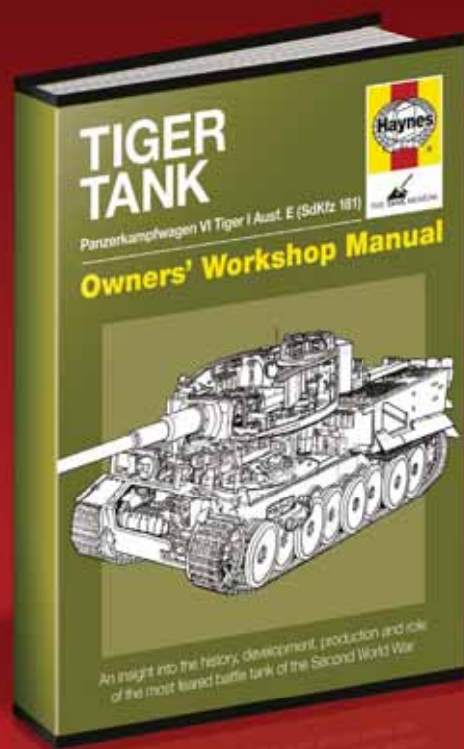
illustrated manuals take the reader not only into the mechanical anatomy of some of the most iconic tanks of the Eastern Front, but also give a crucial insight into the experiences of their crews.

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CHARLES XII'S UNIFORM

In the Great Northern War the king of Sweden was killed during an obscure siege wearing these clothes

Charles XII is one of Sweden's most famous monarchs. Dubbed the "Lion of the North" by Voltaire, Charles was a keen soldier whose talent and speed of movement gave him the nickname 'the Swedish Meteor'.

During the 17th century the Swedish Empire included territories in modern Finland, Norway and Russia. Charles ascended the throne as a teenager in 1697, and three years later the Great Northern War (1700-21) broke out when a Russian-led coalition aimed to contest the supremacy of Sweden. Charles fought back with gusto and won great victories, but he came undone during a disastrous invasion of Russia in 1708-09.

From this point on, Charles's fortunes irrevocably declined and he lost important territories. Despite his reversals, Charles remained an aggressive king and invaded Danish-controlled Norway in 1718. Charles then fatally laid siege to a hilltop border fortress at Fredriksten.

On 30 November 1718 Charles was shot through the head while wearing this uniform as he supervised the night-time construction of a frontline trench. Despite the darkness there were flares illuminating the Swedish trenches, exposing them to Danish musket fire. Charles would have been highly visible wearing his distinctive uniform in the Swedish national colours of blue and yellow. The king was shot when he exposed his head and shoulders to survey the fortifications. A large-calibre projectile passed through his brain, killing him instantly.

Charles's death became shrouded in mystery as rumours spread that his own men possibly killed him for his unpopular rule. Whatever the circumstances, the king's demise ultimately destroyed the Swedish Empire.



Charles XII's complete uniform includes an elaborate coat, cape and gloves. His felt tricorn hat bears a hole where the fatal shot passed through



Charles XII's uniform is a unique set of royal clothing that is distinctly designed in the national colours of Sweden



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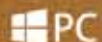
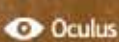


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